KONICA MINOLTA

The essentials of imaging

bizhub 160

User's Guide

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1 Introduction

1.1 Safety Information

This section contains detailed instructions on the operation and maintenance of this machine. To achieve optimum utility of this device, all operators should carefully read and follow the instructions in this manual.

Please read the following section before connecting the machine to the supply. It contains important information related to user safety and preventing equipment problems.

Please keep this manual in a handy place near the machine.

Make sure you observe all of the precautions appear in each section of this manual.

KM_Ver.01E_C

Note
Some parts of the contents of this section may not correspond with the purchased product.

Warning and Precaution Symbols

The following indicators are used on the warning labels or in this manual to categorize the level of safety warnings.

⚠ **WARNING**	Ignoring this warning could cause serious injury or even death.
⚠ **CAUTION**	Ignoring this caution could cause injury or damage to property.

Meaning of Symbols

A triangle indicates a danger against which you should take precaution.

This symbol warns against cause burns.

A diagonal line indicates a prohibited course of action.

This symbol warns against dismantling the device.

A solid circle indicates an imperative course of action.

This symbol indicates you must unplug the device.

Disassemble and modification

⚠ WARNING

- Do not attempt to remove the covers and panels which have been fixed to the product. Some products have a high-voltage part or a laser beam source inside that could cause an electrical shock or blindness.

- Do not modify this product, as a fire, electrical shock, or breakdown could result. If the product employs a laser, the laser beam source could cause blindness.

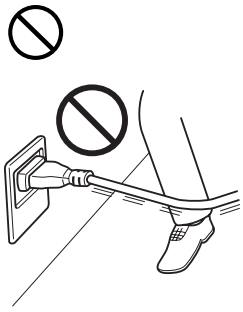
Power cord

⚠ WARNING

- Use only the power cord supplied in the package. If a power cord is not supplied, only use the power cord and plug that is specified in POWER CORD INSTRUCTION. Failure to use this cord could result in a fire or electrical shock.

- Use the power cord supplied in the package only for this machine and NEVER use it for any other product. Failure to observe this precaution could result in a fire or electrical shock.

- Do not scratch, abrade, place a heavy object on, heat, twist, bend, pull on, or damage the power cord. Use of a damaged power cord (exposed core wire, broken wire, etc.) could result in a fire or breakdown. Should any of these conditions be found, immediately turn OFF the power switch, unplug the power cord from the power outlet, and then call your authorized service representative.



Power source

⚠ WARNING

- Use only the specified power source voltage. Failure to do that could result in a fire or electrical shock.

- Connect power plug directly into wall outlet having the same configuration as the plug. Use of an adapter leads to the product connecting to inadequate power supply (voltage, current capacity, grounding), and may result in fire or shock. If proper wall outlet is not available, the customer shall ask qualified electrician for the installation.

- Do not use a multiple outlet adapter nor an extension cord in principle. Use of an adapter or an extension cord could cause a fire or electrical shock.
  Contact your authorized service representative if an extension cord is required.

- Consult your authorized service representative before connecting other equipment on the same wall outlet. Overload could result in a fire.

⚠ CAUTION

- The outlet must be near the equipment and easily accessible. Otherwise you can not pull out the power plug when an emergency occurs.

Power plug

⚠ WARNING

- Do not unplug and plug in the power cord with a wet hand, as an electrical shock could result.

- Plug the power cord all the way into the power outlet. Failure to do this could result in a fire or electrical shock.

⚠ CAUTION

- Do not tug the power cord when unplugging. Pulling on the power cord could damage the cord, resulting in a fire or electrical shock.

- Remove the power plug from the outlet more than one time a year and clean the area between the plug terminals. Dust that accumulates between the plug terminals may cause a fire.

Grounding

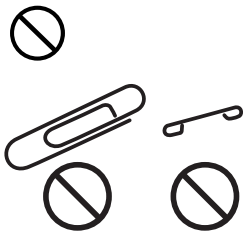
⚠ WARNING

- Connect the power cord to an electrical outlet that is equipped with a grounding terminal.

Installation

⚠ WARNING

- Do not place a flower vase or other container that contains water, or metal clips or other small metallic objects on this product. Spilled water or metallic objects dropped inside the product could result in a fire, electrical shock, or breakdown.
  Should a piece of metal, water, or any other similar foreign matter get inside the product, immediately turn OFF the power switch, unplug the power cord from the power outlet, and then call your authorized service representative.



⚠ CAUTION

- After installing this product, mount it on a secure base. If the unit moves or falls, it may cause personal injury.

- Do not place the product in a dusty place, or a site exposed to soot or steam, near a kitchen table, bath, or a humidifier. A fire, electrical shock, or breakdown could result.

- Do not place this product on an unstable or tilted bench, or in a location subject to a lot of vibration and shock. It could drop or fall, causing personal injury or mechanical breakdown.

- Do not let any object plug the ventilation holes of this product. Heat could accumulate inside the product, resulting in a fire or malfunction.

- Do not use flammable sprays, liquids, or gases near this product, as a fire could result.

Ventilation

⚠CAUTION

- Always use this product in a well ventilated location. Operating the product in a poorly ventilated room for an extended period of time could injure your health. Ventilate the room at regular intervals.

Actions in response to troubles

⚠WARNING

- Do not keep using this product, if this product becomes inordinately hot or emits smoke, or unusual odor or noise. Immediately turn OFF the power switch, unplug the power cord from the power outlet, and then call your authorized service representative. If you keep on using it as is, a fire or electrical shock could result.

- Do not keep using this product, if this product has been dropped or its cover damaged. Immediately turn OFF the power switch, unplug the power cord from the power outlet, and then call your authorized service representative. If you keep on using it as is, a fire or electrical shock could result.

⚠CAUTION

- The inside of this product has areas subject to high temperature, which may cause burns.
  When checking the inside of the unit for malfunctions such as a paper misfeed, do not touch the locations (around the fusing unit, etc.) which are indicated by a “Caution HOT” caution label.

Consumables

⚠ WARNING

- Do not throw the toner cartridge or toner into an open flame. The hot toner may scatter and cause burns or other damage.

⚠ CAUTION

- Do not leave a toner unit or drum unit in a place within easy reach of children. Licking or ingesting any of these things could injure your health.

- Do not store toner units and PC drum units near a floppy disk or watch that are susceptible to magnetism. They could cause these products to malfunction.

When moving the machine

⚠ CAUTION

- Whenever moving this product, be sure to disconnect the power cord and other cables. Failure to do this could damage the cord or cable, resulting in a fire, electrical shock, or breakdown.

- When moving this product, always hold it by the locations specified in the User's Guide or other documents. If the unit falls it may cause severe personal injury. The product may also be damaged or malfunction.

Before successive holidays

⚠ CAUTION

- Unplug the product when you will not use the product for long periods of time.

1.2 Regulation Notices

CE Marking (Declaration of Conformity)

This product complies with the following EU directives:
89/336/EEC, 73/23/EEC and 93/68/EEC directives.
This declaration is valid for the region of the European Union.

This device must be used with shielded interface cables. The use of non-shielded cable is likely to result in interference with radio communications and is prohibited under EU directives.

For U.S.A. Users
FCC Part 15-Radio Frequency Devices

FCC: Declaration of Conformity	
Product Type	Multi Function Product
Product Name	bizhub 160
Options	
This device complies with Part 15 of the FCC Rules Operation is subject to the following two conditions: • This device may not cause harmful interference, and this device must accept any interference received, including interference that may cause undesired operation.	

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interface by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING: The design and production of this unit conform to FCC regulations, and any changes or modifications must be registered with the FCC and are subject to FCC control. Any changes made by the purchaser or user without first contacting the manufacturer will be subject to penalty under FCC regulations.

This device must be used with shielded interface cables. The use of non-shielded cable is likely to result in interference with radio communications and is prohibited under FCC rules.

For Canada Users
Interference-Causing Equipment Standard (ICES-003 Issue 3)

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

For users in countries subject to Class B regulations

This device must be used with shielded interface cables. The use of non-shielded cable is likely to result in interference with radio communications and is prohibited under CISPR 22 rules and local rules.

For users in countries not subject to Class B regulations

WARNING
This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

This device must be used with shielded interface cables. The use of non-shielded cable is likely to result in interference with radio communications and is prohibited under CISPR 22 rules and local rules.

Laser Safety

This is a digital machine which operates using a laser. There is no possibility of danger from the laser provided the machine is operated according to the instructions in this manual.

Since radiation emitted by the laser is completely confined within a protective housing, the laser beam cannot escape from the machine during any phase of user operation.

This machine is certified as a Class 1 laser product. In other words, the machine does not produce hazardous laser radiation.

Internal Laser Radiation

Maximum Average Radiation Power: 36.903 µW at the laser aperture of the print head unit.

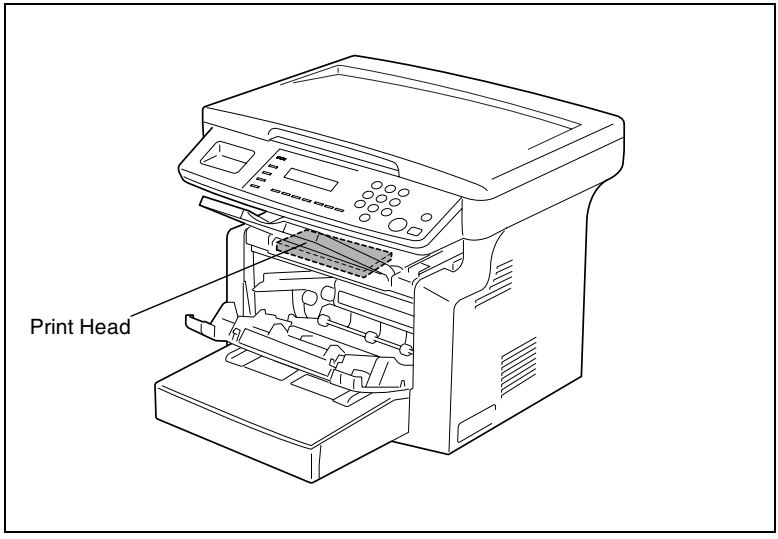
Wavelength: 770-800 nm

This product employs a Class 3b laser diode that emits an invisible laser beam.

The laser diode and the scanning polygon mirror are incorporated in the print head unit.

The print head unit is NOT A FIELD-SERVICEABLE ITEM.

Therefore, the print head unit should not be opened under any circumstances.



CDRH Regulation

This machine is certified as a Class 1 Laser product under Radiation Performance Standard according to the Food, Drug and Cosmetic Act of 1990. Compliance is mandatory for Laser products marketed in the United States and is reported to the Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration of the U.S. Department of Health and Human Services (DHHS). This means that the device does not produce hazardous laser radiation.

The label shown on page 1-14 indicates compliance with the CDRH regulations and must be attached to laser products marketed in the United States.

CAUTION
Use of controls, adjustments or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

This is a semiconductor laser. The maximum power of the laser diode is 15 mW and the wavelength is 770-800 nm.

For European Users

CAUTION
Use of controls, adjustments or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

This is a semiconductor laser. The maximum power of the laser diode is 15 mW and the wavelength is 770-800 nm.

For Denmark Users

ADVARSEL
Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling. Klasse 1 laser produkt der opfylder IEC60825 sikkerheds kravene.

Dansk: Dette er en halvlederlaser. Laserdiodens højeste styrke er 15 mW og bølgelængden er 770-800 nm.

For Finland, Sweden Users

LOUKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

VAROITUS!
Laitteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

Tämä on puolijohdelaser. Laserdiodin sunrin teho on 15 mW ja aallonpituus on 770-800 nm.

VARNING!
Om apparaten används på annat sätt än i denna bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

Det här är en halvledarlaser. Den maximala effekten för laserdioden är 15 mW och våglängden är 770-800 nm.

VARO!
Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

VARNING!
Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.

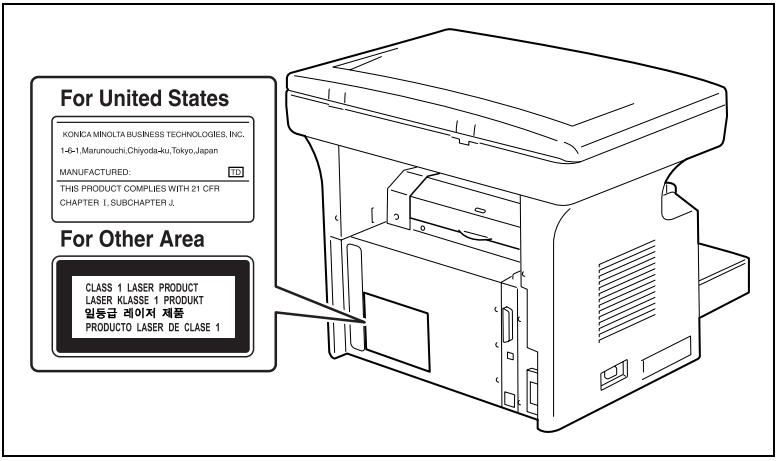
For Norway Users

ADVERSEL
Dersom apparatet brukes på annen måte enn spesifisert i denne bruksanvisning, kan brukeren utsettes for unsynlig laserstråling som overskrider grensen for laser klass 1.

Dette en halvleder laser. Maksimal effekt till laserdiode er 15 mW og bølgelengde er 770-800 nm.

Laser Safety Label

A laser safety label is attached to the outside of the machine as shown below.



Ozone Release

NOTE

= Locate the Machine in a Well-Ventilated Room =

A negligible amount of ozone is generated during normal operation of this machine. An unpleasant odor may, however, be created in poorly ventilated rooms during extensive machine operations. For a comfortable, healthy, and safe operating environment, it is recommended that the room be well ventilated.

REMARQUE

= Placer l'appareil dans une pièce largement ventilée =

Une quantité d'ozone négligable est dégagée pendant le fonctionnement de l'appareil quand celui-ci est utilisé normalement. Cependant, une odeur désagréable peut être ressentie dans les pièces dont l'aération est insuffisante et lorsque une utilisation prolongée de l'appareil est effectuée. Pour avoir la certitude de travailler dans un environnement réunissant des conditions de confort, santé et de sécurité, il est préférable de bien aérer la pièce ou se trouve l'appareil.

Acoustic Noise

For European Users

Maschinenlärminformations-Verordnung 3. GPSGV: Der höchste Schalldruckpegel beträgt 70 dB(A) oder weniger gemäss EN ISO 7779.

1.3 Energy Star®

As an ENERGY STAR® Partner, we have determined that this machine meets the ENERGY STAR® Guidelines for energy efficiency.

What is an ENERGY STAR® Product?

An ENERGY STAR® product has a special feature that allows it to automatically switch to a “low-power mode” after a period of inactivity. An ENERGY STAR® product uses energy more efficiently, saves you money on utility bills and helps protect the environment.

1.4 Trademarks and Registered Trademarks

KONICA MINOLTA, KONICA MINOLTA Logo, and The essentials of imaging are registered trademarks or trademarks of KONICA MINOLTA HOLDINGS, INC.

PageScope and bizhub are registered trademarks or trademarks of KONICA MINOLTA BUSINESS TECHNOLOGIES, INC.

Netscape Communications, the Netscape Communications logo, Netscape Navigator, Netscape Communicator, and Netscape are trademarks of Netscape Communications Corporation.

PageScope Box Operator:
This software is based in part on the work of the Independent JPEG Group.

Compact-VJE
Copyright 1986-2003 VACS Corp.

1.5 Explanation of Manual Conventions

The marks and text formats used in this manual are described below.

WARNING

Failure to observe instructions highlighted in this manner may result in fatal or critical injuries.

➔ Observe all warnings in order to ensure safe use of the machine.

CAUTION

Failure to observe instructions highlighted in this manner may result in serious injuries or property damage.

➔ Observe all cautions in order to ensure safe use of the machine.

...

Note*

*(*May also appear as "Important" or "Tip")*

Text highlighted in this manner contains useful information and tips to ensure safe use of the machine.

1 The number 1 as formatted here indicates the first step of a sequence of actions.

2 Subsequent numbers as formatted here indicate subsequent steps of a sequence of actions.

? *Text formatted in this style provides additional assistance.*

➔ Text formatted in this style describes the action that will ensure the desired results are achieved.

An illustration inserted here shows what operations must be performed.

[Copy] key

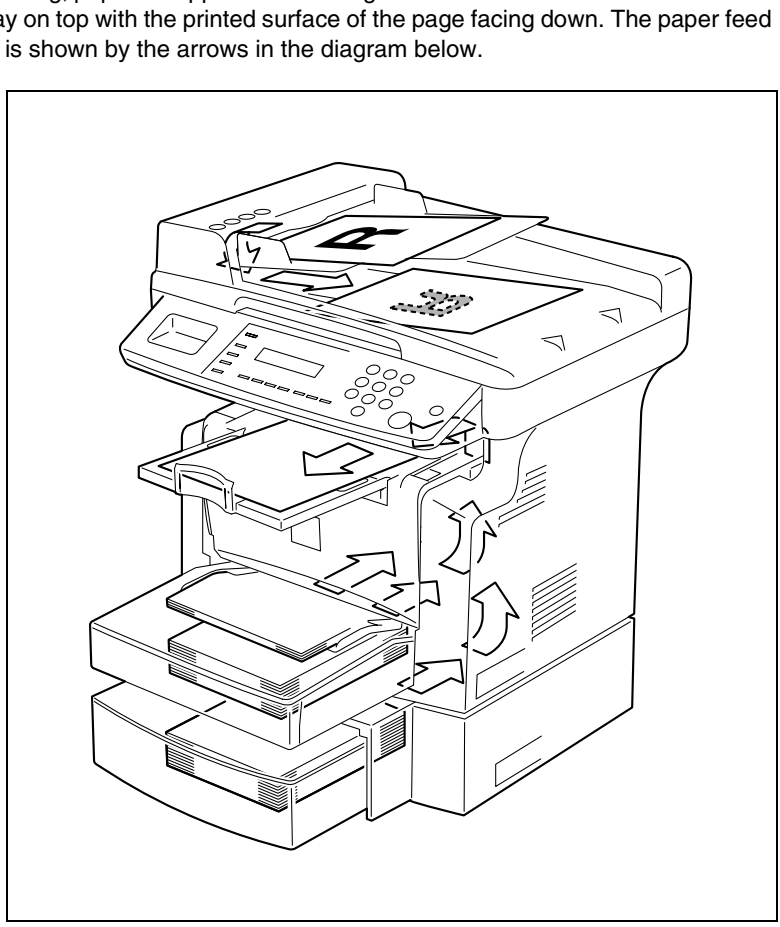
The names of keys on the control panel are written as shown above.

1.6 Explanation of Basic Concepts and Symbols

The use of words and symbols in this manual are explained below.

Paper Feeding

During printing, paper is supplied from the right side of the machine and fed into the Copy Tray on top with the printed surface of the page facing down. The paper feed direction is shown by the arrows in the diagram below.

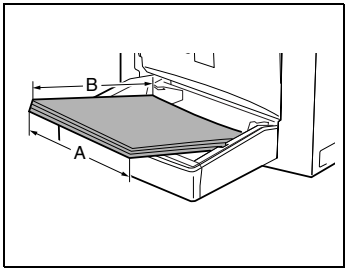


“Width” and “Length”

Whenever paper dimensions are mentioned in this manual, the first value always refers to the width of the paper (shown as “A” in the illustration) and the second to the length (shown as “B”).

A: Width

B: Length



Precaution 2

Observe the following precautions to maintain the machine in its best possible condition.

2.1 Installation Precautions

Installation Site

To ensure utmost safety and prevent possible malfunctions, install the machine in a location that meets the following requirements:

- A location away from curtains, etc. that may catch fire and burn easily
- A location that is not exposed to water or other liquids
- A location free from direct sunlight
- A location out of the direct airflow of an air conditioner or heater, and not exposed to extremely high or low temperatures
- A well-ventilated location
- A location that is not exposed to high humidity
- A location that is not extremely dusty
- A location not subjected to undue vibrations
- A stable and level location
- A location where ammonia or other organic gases are not generated
- A location that does not put the operator in the direct airflow of exhaust from the machine
- A location that is not near any kind of heating devices

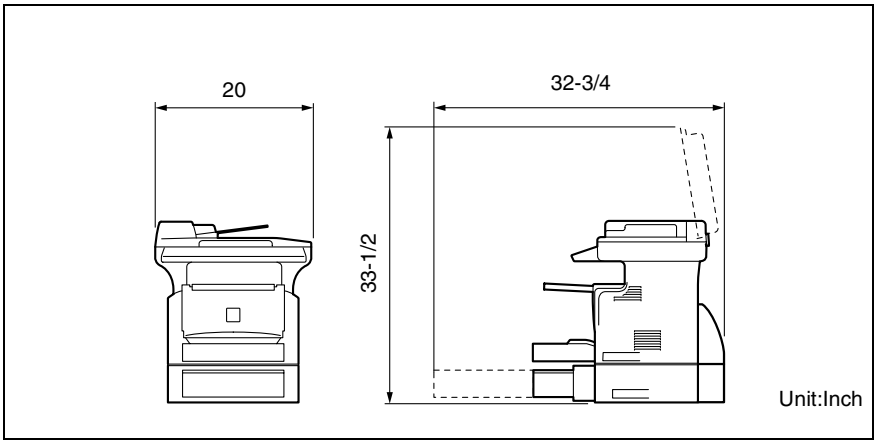
Power Source

The power source requirements are as follows.

- Voltage Fluctuation: AC 110 V - 127 V -10%, +6%, or AC 220 V - 240 V ±10%
- Frequency Fluctuation: Within ±2.5 Hz
  - Use a power source with as few voltage or frequency fluctuations as possible.

Space Requirements

To ensure easy machine operation, supply replacement, and maintenance, adhere to the recommended space requirements detailed below.



Note

In order to enable easy machine maintenance and replacement of consumables, maintain an adequate amount of space around the machine.

When lifting the machine, be sure to grab the handles on the left and right sides from the rear of the machine. If the machine is lifted from its front, it may become unbalanced and fall.

2.2 Operation Precautions

Operating Environment

The environmental requirements for correct operation of the machine are as follows:

- Temperature: 50°F to 86°F (10°C to 30°C) with fluctuations of no more than 18°F (10°C) within an hour
- Humidity: 15% to 85% with fluctuations of no more than 20% within an hour

Proper Use

To ensure the optimum performance of the machine, follow the precautions listed below:

- Never place heavy objects on the Original Glass or subject it to shocks.
- Never open any machine doors or turn off the machine while it is making copies/ printing, as a paper misfeed could result.
- Never bring any magnetized object, or use flammable sprays or liquids, near the machine.
- Always make sure that the power plug is completely plugged into the electrical output.
- Always make sure that the machine's power plug is visible and not hidden by the machine.
- Always unplug the machine from the electrical outlet if the machine is not to be used for a long period of time.
- Always provide good ventilation when making a large number of continuous copies/printed pages.

CAUTION

A negligible amount of ozone is generated during normal operation of this machine. An unpleasant odor may, however, be detected in poorly ventilated rooms during extensive machine operations.

→ For a comfortable operating environment, it is recommended that the room be well ventilated.

CAUTION

The area around the Fusing Unit is extremely hot.

➔ In order to reduce the risk of burns, do not touch any area other than those indicated in the manual. Be especially careful not to touch parts marked with warning labels, and their surrounding areas.

Transporting the Machine

If you need to transport the machine over a long distance, consult your service representative.

Care of Machine Supplies

Use the following precautions when handling the machine supplies (toner, paper, etc.).

- Store the supplies in a location that meets the following requirements:
  Free from direct sunlight
  Away from any heating apparatus
  Not subjected to high humidity Not extremely dusty
- Paper that has been removed from its wrapper but not loaded in the machine should be stored in a sealed plastic bag in a cool, dark place.
- Use only toner that has been manufactured specifically for this machine. Never use other types of toner.
- Keep all supplies out of the reach of children.

CAUTION

Be careful not to spill toner inside the machine or get toner on your clothes or hands.

➔ If your hands become soiled with toner, immediately wash them with soap and water.

2.3 Legal Restrictions on Copying

Certain types of documents must not be copied with the purpose or intent to pass copies of such documents off as the originals.

The following is not a complete list, but is meant to be used as a guide to responsible copying.

<Financial Instruments>

- Personal checks
- Traveler's checks
- Money orders
- Certificates of deposit
- Bonds or other certificates of indebtedness
- Stock certificates

<Legal Documents>

- Food stamps
- Postage stamps (canceled or uncanceled)
- Checks or drafts drawn by government agencies
- Internal revenue stamps (canceled or uncanceled)
- Passports
- Immigration papers
- Motor vehicle licenses and titles
- House and property titles and deeds

<General>

- Identification cards, badges, or insignias
- Copyrighted works without permission of the copyright owner

In addition, it is prohibited under any circumstances to copy domestic or foreign currencies, or works of art, without permission of the copyright owner.

When in doubt about the nature of a document, consult with legal counsel.

Before Making Copies

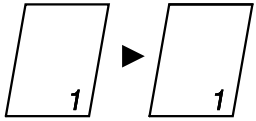
3

3.1 Available Features

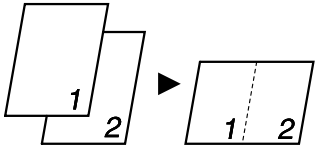
The main copy settings available with this machine are listed below. For details on their operation, refer to the pages indicated.

Copies

- 1-sided copies (p. 4-2)



- 2in1 copies (p. 4-14)

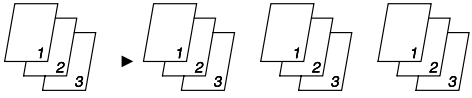


Zoom Ratio

- Reduced/Full Size/Enlarged (p. 4-10)

Finishing

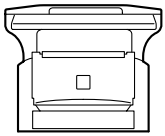
- Sort (p. 4-15)



3.2 Components and Their Functions

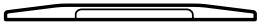
Main Unit

- bizhub 160



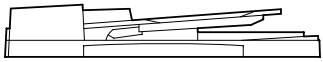
Original Cover OC-503 (option)

- Presses down on the loaded document to keep it in place.



Automatic Document Feeder DF-501 (option)

- Automatically feeds originals one page after another for scanning.



Paper Feed Unit PF-501 (option)

- Capable of holding up to 500 sheets of paper.

Expanded Memory Unit EM-101 (option)

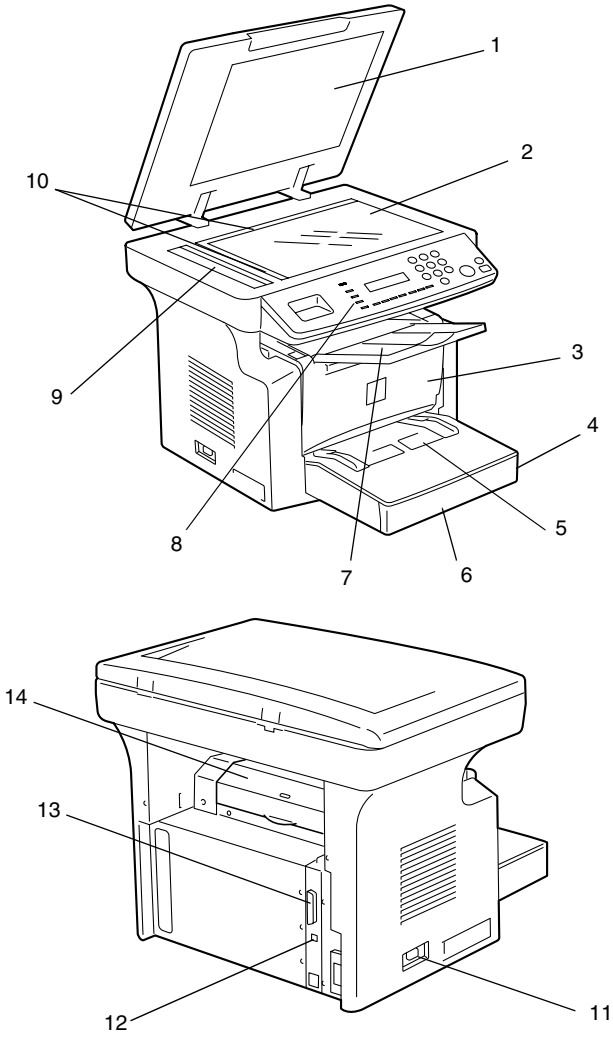
- Increases the machine's memory (32 MB Memory). By increasing the machine's memory, more pages can be scanned.

Mechanical Counter MC-502 (option)

- Displays the total number of pages printed until the current time.

3.3 Parts Names and Their Functions

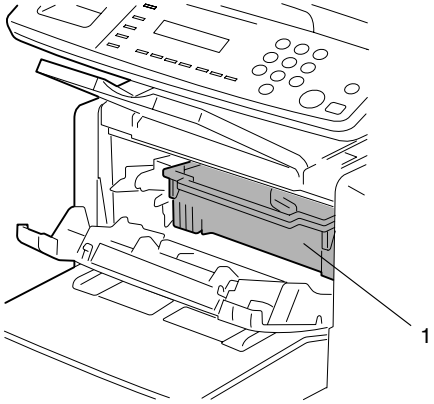
Main Unit



No.	Part Name	Description
1	Original Cover (option)	Holds the original against the Original Glass.
2	Original Glass	Place your original on this glass to allow the machine to scan it. The original is to be placed face down. (p. 3-26)

No.	Part Name	Description
3	Front Cover	Open when replacing the Toner Cartridge or Drum Cartridge, or clearing a paper misfeed. (p. 6-5)
4	Tray1	Holds up to 250 sheets of paper and easily adjusts to different paper sizes. Special paper can be used. (p. 3-16)
5	Bypass Tray	Use for manual feeding of paper. Holds up to 10 sheets of paper. Special paper can be used. (p. 3-22)
6	Tray1 door	If Legal-size paper is installed, open this door.
7	Copy Tray	Holds copies fed out face down from the machine. The Copy Tray can be adjusted to one of three angles. Adjust the Copy Tray to the angle appropriate for its application. (p. 3-7)
8	Control Panel	Use to start a copy cycle and make necessary settings. (p. 3-10)
9	Exposure Lamp	This lamp irradiates the document when it is scanned. The time until the exposure lamp goes off can be specified. For details on specifying the setting, refer to *"Selecting the "MACHINE SETTING" Menu" on page 5-3*.
10	Original Scales	Use to align the original. (p. 3-26)
11	Power Switch	Use to turn the machine on and off. (p. 3-12)
12	USB Port	For details, refer to the User's Guide for the printer controller.
13	Parallel Port	For details, refer to the User's Guide for the printer controller.
14	Fuser Cover	Open when clearing the misfed paper.

Inside the Machine

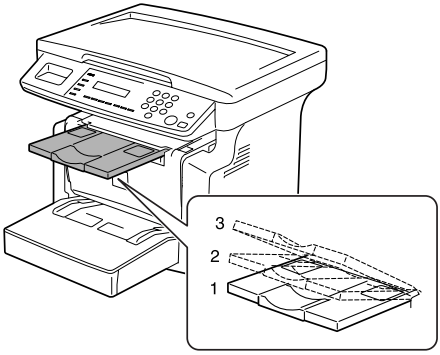


No.	Part Name	Description
1	Imaging Cartridge	Generates the copy image. The Imaging Cartridge is constructed of both the Drum Cartridge and the Toner Cartridge set into place.

Adjusting the Angle of the Copy Tray

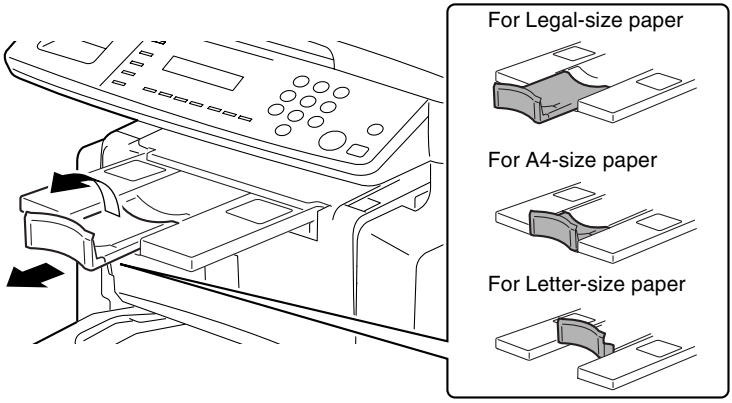
The Copy Tray can be adjusted to one of three angles. Adjust the tray to the angle appropriate for the desired application.

1. Normal operation (standard position)
2. When back curled paper is fed out
3. When clearing a paper misfeed or replacing the Drum Cartridge or Toner Cartridge

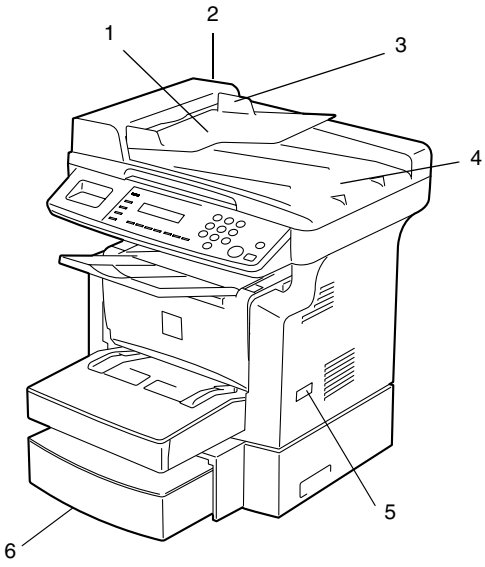


Note

Adjust the Tray Extension and Paper Stopper to fit the size of the paper.



Options



Automatic Document Feeder DF-501

No.	Part Name	Description
1	Document Feeder Tray	Load the originals to be scanned face up on this tray. Up to 50 document sheets can be loaded at one time. (p. 3-25)
2	Document Feeder Cover (Doc. Feed Cover)	Open when clearing an original that has been misfed. (p. 6-20)
3	Document Guide Plate	Slide the guide plate to the size of the originals. (p. 3-25)
4	Document Exit Tray	Receives originals which have been scanned by the machine.

Mechanical Counter MC-502

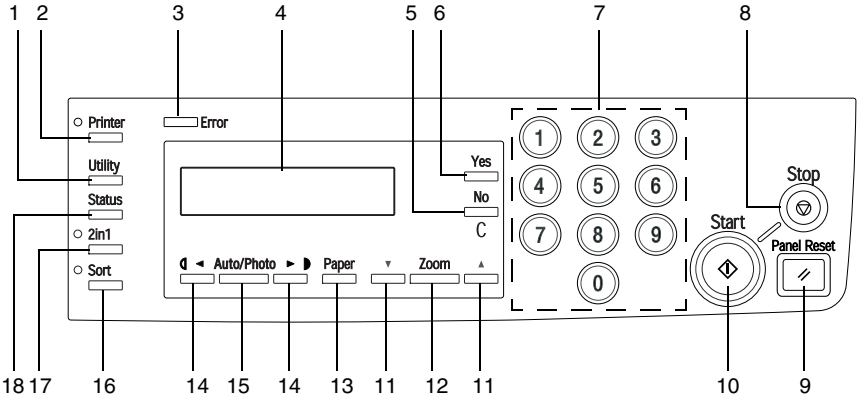
No.	Part Name	Description
5	Counter	Display the total number of pages printed until counter time.

Paper Feed Unit PF-501

No.	Part Name	Description
6	Tray2	Holds up to 500 sheets of paper. (p. 3-23)

3.4 Control Panel

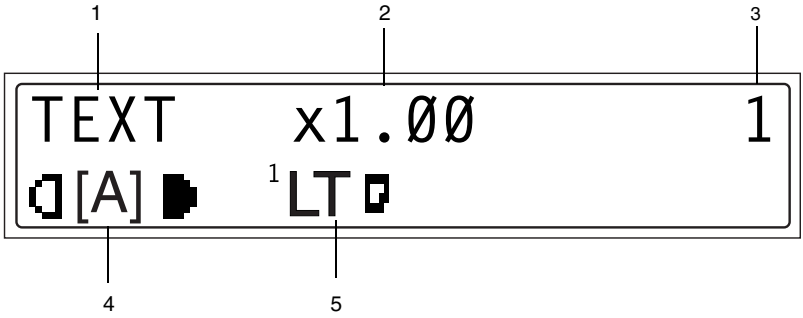
Names of Control Panel Parts and Their Functions



No.	Part Name	Description
1	[Utility] key	Press to enter Utility mode. For details, refer to *"Using the Utility Mode" on page 5-1*.
2	[Printer] key	Press to enter Printer mode. For details, refer to the User's Guide for the printer controller.
3	Error lamp	The indicator lights up in orange if an error or malfunction occurs. For details, refer to *"When a Message Appears" on page 6-1*.
4	Display	Shows the number of copies to be made, the zoom ratio, and other setting date.
5	[No/C] key	• Press to reset the number of copies to "1". • Press to clear the various settings. • Press to return to the previous screen. • Press to specify the various settings.
6	[Yes] key	• Press to validate the setting just made. • Press to specify the various settings.
7	10-Key Pad	Use to type in the number of copies to be made and any other numeric date.
8	[Stop] key	• Press to stop a print cycle. • Press to stop a scanning sequence. • The indicator flashes in orange when the machine is paused or while copying.
9	[Panel Reset] key	Press to reset all copy functions and settings to their defaults.

No.	Part Name	Description
10	[Start] key	• Press to start a scanning or print cycle. • Press to specify the various settings. • The indicator lights up in green when the machine can accept copy jobs.
11	[▲] [▼] key	• Press to change the zoom ratio in the range between × 0.25 and × 4.00 in × 0.01 increments. • Press to scan through the various settings and information, in order. • Press to specify the various settings.
12	[Zoom] key	Press to select a zoom ratio from among those fixed ratios available as standard.
13	[Paper] key	Press to select the paper tray that contains the desired paper.
14	[◄] [►] key	• Press to adjust the image density. • Press to specify the various settings.
15	[Auto/Photo] key	Press to change the image density mode.
16	[Sort] key	Press to select the sort function.
17	[2in1] key	Press to select the 2in1 function.
18	[Status] key	Press to display each Counter value. (p. 3-30)

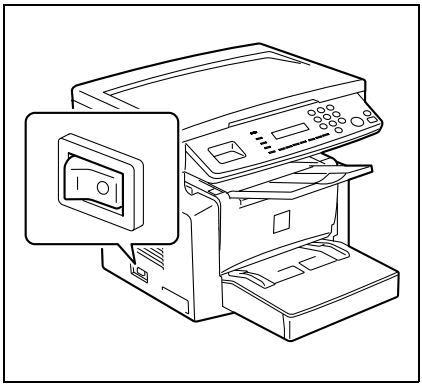
Display Indications



No.	Display Indication	Description
1	Document type	Displays the document type currently specified for the image density.
2	Zoom ratio	Displays the currently specified zoom ratio.
3	Number of copies	Displays the currently specified number of copy pages and number of copy sets.
4	Image density	Displays the currently specified image density.
5	Paper	Displays the currently selected paper tray, paper size and paper type.

3.5 Turning the Machine On/Off and the Initial Mode

Turning the Machine On/Off



To turn on the machine:

➔ Press the | (on) side of the Power Switch.

To turn off the machine:

➔ Press the ○ (off) side of the Power Switch.

Note

Do not turn off the machine while a copy cycle is being performed, as a paper misfeed will result. Before attempting to turn off the machine, always be sure that the current copy cycle has been completed.
Turning off the machine will initialize all settings except those for previously programmed jobs and for the Utility mode.

The machine automatically enters the Energy Save mode 15 min after the last operation is performed.
The time until the machine enters Energy Save mode can be specified from the Utility mode. For details, refer to "Specifying the Setting for "ENERGY SAVE MODE"" on page 5-5 in the chapter "Using the Utility Mode".

When the Machine is Turned On

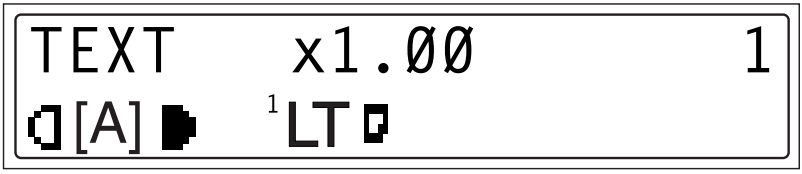
When the machine is turned on, the [Start] key indicator lights up in orange to indicate that the machine is ready to begin copying.

At this time, the machine can be set for the Auto Copy Start function by loading a document into the Automatic Document Feeder or by placing a document on the Original Glass, and pressing the [Start] key.

Pressing the [Start] key at this time will not immediately start the copy cycle. You will have to wait for less than 25 seconds (at an ambient temperature of 73.4°F).

Default Settings

When the machine is turned on, the Initial mode screen appears in the Display of the Control Panel. The Initial mode screen appears at the beginning of all operations.



Factory default settings

- Number of copies: 1
- Image density: TEXT Auto
- Zoom ratio: 100% (full size)
- Paper: Tray1
- Finishing: Non-Sort

...

Tip

The default settings can be customized from the Utility mode. For details, refer to “Using the Utility Mode” on page 5-1.

3.6 Useful Functions

Panel Resetting

Press the [Panel Reset] key to return all modes and functions (zoom ratio, number of copies, etc.) to their defaults. (All selected settings are canceled.)

Tip

The [Panel Reset] key comes in handy for canceling all selected settings at one time.

To avoid accidentally using settings from the previous copy job, press the [Panel Reset] key to return all functions and settings to their defaults before specifying any settings for your current job.

Auto Panel Reset

Even if the [Panel Reset] key is not pressed, the machine automatically resets all functions and settings to their defaults 1 min after a copy cycle has been completed or a key operation is performed.

Tip

The length of time before the machine automatically resets itself can be set between 1 min and 5 min in addition to 30 seconds. The Auto Panel Reset function can even be disabled.

For details, refer to "Specifying the Setting for "AUTO PANEL RESET"" on page 5-4.

Energy Save Mode

Instead of turning off the machine, it can be set into a standby state (Energy Save mode).

If the machine is not used for a set length of time, it will automatically enter the Energy Save mode. The default length of time is 15 min.

To cancel the Energy Save mode, press any key on the control panel.

Tip

The length of time before the machine enters the Energy Save mode can be set between 1 min and 240 min.

For details, refer to "Specifying the Setting for "ENERGY SAVE MODE"" on page 5-5.

Auto Copy Start

If a document is loaded and the [Start] key is pressed during the period after the machine has been turned on but before it is ready to make copies, the machine will automatically start the copy cycle as soon as it completes the warm-up cycle.

Auto Tray Switching

If the tray runs out of paper while printing, the machine will automatically switch to a different paper source and continue copying provided that the new tray contains paper of the same type and size in the same orientation.

If the optional Paper Feed Unit is installed, a maximum of 750 pages can be continuously printed.

Tray1 → Tray2 (Paper Feed Unit)

Tray2 (Paper Feed Unit) → Tray1

Tip

Auto tray switching can be disabled. For details, refer to "Setting Up the Paper Sources" on page 5-12.

3.7 Copy Paper

Paper Specifications

The following table specifies the type and size of paper to be used with each tray together with its capacity.

Tray1	Specifications
Paper Type	• Plain paper, recycled paper (16 lb to 24 lb) • Exclusive paper: card (24-1/4 lb to 43-1/4 lb), OHP transparencies, envelopes
Paper Size	• A4 L, B5 L, A5 L, 16K L, Legal L, Letter L, Half Letter L, FLS (13 × 8-1/4) • Custom Size: Width: 3-1/2 to 8-1/2; length: 5-1/2 to 14
Capacity	• Plain paper, recycled paper: 250 sheets (20 lb) • Exclusive paper: card; 10 sheets, OHP transparencies; 5 sheets, envelopes; 1 sheet

Tray2	Specifications
Paper Type	Plain paper, recycled paper (16 lb to 24 lb)
Paper Size	Letter L, A4 L*
Capacity	500 sheets (20 lb)

* Two tray types are available for Tray2. Select the desired tray type at the time of purchase.

Bypass Tray	Specifications
Paper Type	• Plain paper, recycled paper (16 lb to 24 lb) • Exclusive paper: card (24-1/4 lb to 43-1/4 lb), OHP transparencies, envelopes, label sheets
Paper Size	• A4 L, B5 L, A5 L, 16K L, Legal L, Letter L, Half Letter L, FLS (13 × 8-1/4) • Custom Size: Width: 3-1/2 to 8-1/2; length: 5-1/2 to 14
Capacity	• Plain paper, recycled paper: 10 sheets (20 lb) • Exclusive paper: card; 1 sheet, OHP transparencies; 1 sheet, envelopes; 1 sheet

L: Lengthwise

Precautions for Loading Paper

- Be sure to observe the paper specifications (paper type, paper size, and capacity) for each tray, otherwise a paper misfeed could result.
- When paper is loaded into the Bypass Tray, a message appears, indicating that the paper size be specified. Specify the size and type of paper that is loaded. Paper loaded into the Bypass Tray is given priority during feeding.
- The size of FLS is preset to 13 × 8-1/4. To change the FLS size, contact a service representative.

Unsuitable Paper

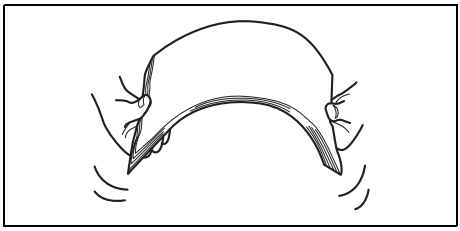
The following types of paper should not be used, otherwise decreased print quality, paper misfeeds or damage to the machine may occur.

- Overhead projector transparencies that have already been fed through the machine
  Even if the transparency is still blank, do not reuse it.
- Paper that has been printed on by a heat-transfer printer or an inkjet printer
- Paper that is either extremely thick or extremely thin
- Folded, curled, wrinkled, or torn paper
- Paper that has been left unwrapped for a long period of time
- Damp paper
- Perforated paper or paper with punched holes
- Extremely smooth or extremely rough paper, or paper with an uneven surface
- Paper that has been treated, such as carbon-backed, heat-sensitive or pressure-sensitive paper
- Paper that has been decorated with foil or embossing
- Paper of a non-standard shape (not rectangular)
- Paper that is bound with glue, staples or paper clips
- Paper with labels attached
- Paper with ribbons, hooks, buttons, etc. attached

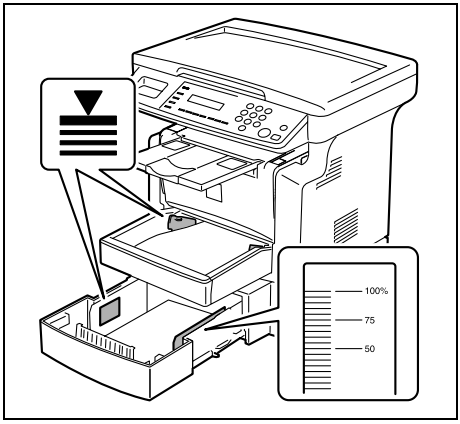
Loading Paper

While loading paper, be sure to observe the following precautions.

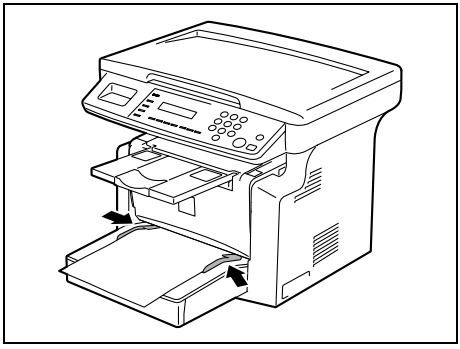
- If the paper is curled, flatten it before loading it.



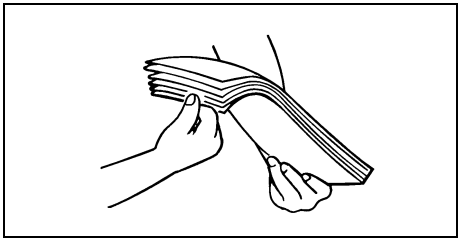
- Do not load so much paper that the top of the stack is higher than the ▼ mark or exceeds the specified number of sheets.



- Push the paper guides firmly up against the edges of the paper.

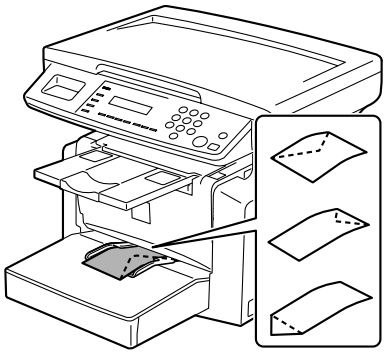


- When loading additional paper, remove any paper remaining in the drawer, place it on top of the new paper, and then align the paper in the stack well before loading it into the drawer.

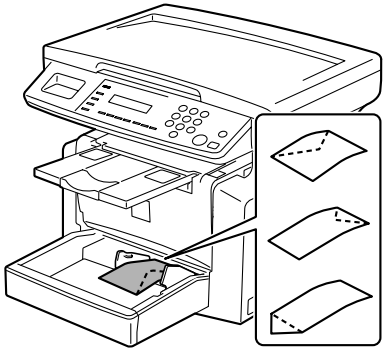


- When loading envelopes, load them with the flap facing down, as shown in the illustration at the right.

<Bypass Tray>



<Tray1>



Note

Before loading envelopes, press them down to make sure that all air is removed, and make sure that the folds of the flaps are firmly pressed, otherwise the envelopes may become wrinkled or a paper misfeed may occur.

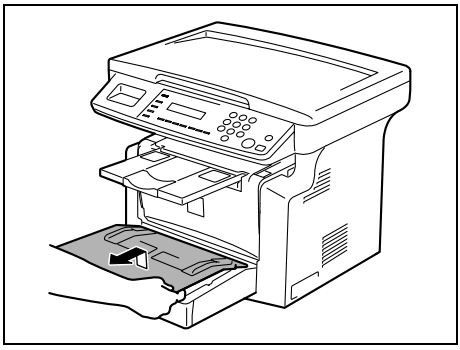
Only 1 envelope at a time can be loaded in Tray1 and the Bypass Tray.

Tip

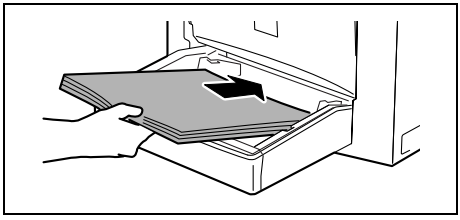
We recommend replenishing the paper only after all of the paper in the drawer has been used.

Loading Paper into Tray1

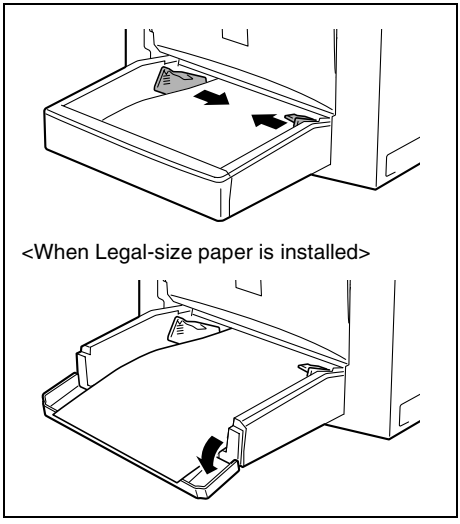
1 Remove the Bypass Tray.



2 Load the paper into the tray so that the front side of the paper (the side facing up when the package was unwrapped) faces up.



3 Slide the paper guides against the edges of the paper.



<When Legal-size paper is installed>

❍ If Legal-size paper is installed, open the door of Tray1.

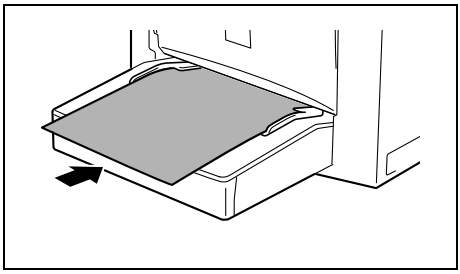
4 Attach the Bypass Tray in its original position.

Note

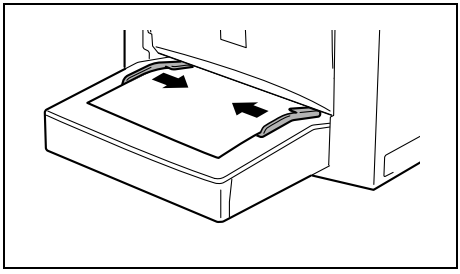
If paper with a different size or type is loaded, various settings must be specified from the "PAPER SOURCE SETUP" menu in the Utility mode. If the settings are not correctly specified, paper size error may occur. For details, refer to "Specifying the Setting for "TRAY SETTING"" on page 5-16.

Loading Paper into the Bypass Tray

1 Load the paper so that the front side of the paper (the side facing up when the package was unwrapped) faces up.



2 Slide the paper guides against the edges of the paper.

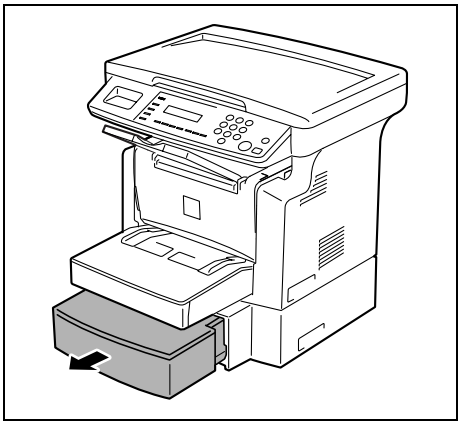


Note

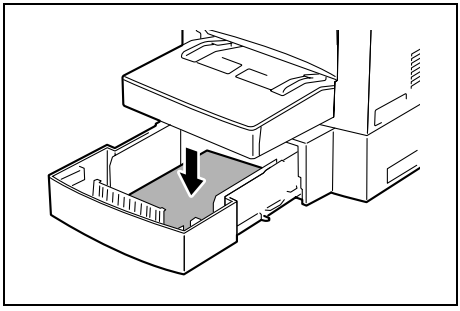
When paper is loaded into the Bypass Tray, the paper size and type must be specified, otherwise paper size error may occur. For details, refer to "Specifying the Size and Type of Manually Fed Paper" on page 4-5.

Loading Paper into Tray2 (Optional)

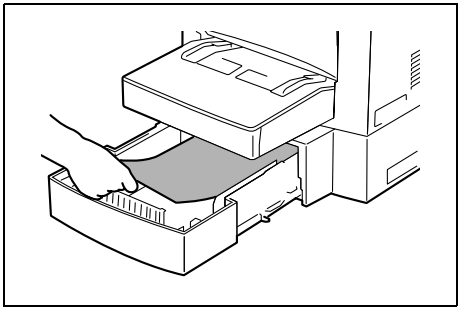
1 Pull out the drawer for Tray2.



2 Remove the drawer cover, and then press down on the paper-lifting plate until it locks into place.



3 Load the paper into the drawer so that the front side of the paper (the side facing up when the package was unwrapped) faces up.



4 Attach the drawer cover, and then return the drawer for Tray2 to its original position.

3.8 Loading Originals

Two Ways of Loading the Original

The original may be loaded in the Automatic Document Feeder or placed directly on the Original Glass. Choose the appropriate method according to the type of the original.

Specific Types of Originals

Original Loading	Original Type	Original Size
Automatic Document Feeder	Sheet originals Weight of originals: 9-1/4 lb to 34 lb	A4 L, B5 L, A5 L, Legal L, Letter L, Half Letter L • Original width: 5-1/2 to 8-1/2 • Original length: 5-1/2 to 14
Original Glass	Max. weight of sheet originals, books, or three-dimensional objects: 4-1/2 lb	Maximum: Legal

L: Lengthwise

Loading Originals in the Automatic Document Feeder

The Automatic Document Feeder automatically feeds originals one page after another so that the machine can scan the data on each page. After the machine finishes scanning the data, the Automatic Document Feeder ejects the page into the Exit Tray. To ensure the best possible performance of the Automatic Document Feeder, use only originals of the specified type.

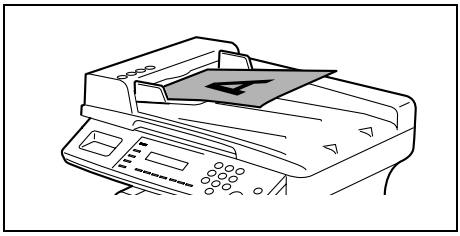
Precautions for Loading Paper Into the Automatic Document Feeder

The following types of originals are not suitable for use in the Automatic Document Feeder, as a misfeed or damaged original could result. Place such types of originals on the Original Glass.

- Typing paper, paraffin paper, and other thin paper
- Cards
- Originals larger than Legal L or smaller than Half Letter
- OHP transparencies, translucent paper
- Wrinkled, dog-eared, curled, or torn originals
- Clipped or stapled originals
- Coated originals such as carbon-backed paper
- Up to 19 Letter-size document pages can be scanned and stored in the memory at one time. However, if the optional expansion memory is installed, up to 180 scanned pages can be stored.

Loading Originals into the Automatic Document Feeder

1 Place the stack of originals face up on the Document Feeder Tray.

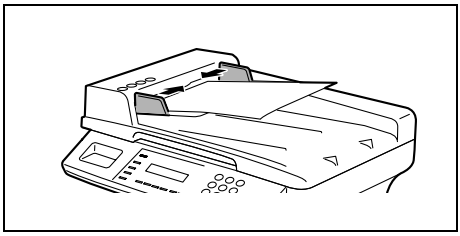


Note
A maximum of 50 document pages can be loaded.

Do not load so many pages that the top of the stack is higher than the ▼ mark.

Be sure to adjust the document guides so that they are against the edges of the document, otherwise the document may not be fed in straight.

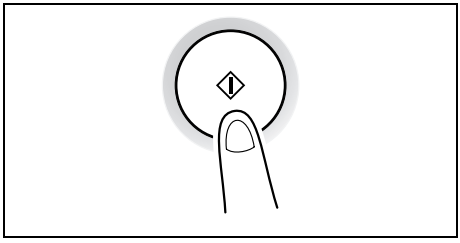
2 Slide the front adjustable Document Guide Plate to the size of the originals.



3 Specify the desired copy settings.

❍ *"Making Copies" on page 4-1*

4 Press the [Start] key to start feeding and copying the originals from the top page.



Placing the Original on the Original Glass

The method for positioning the original differs depending on the type of original being used.

Precautions for Placing the Original on the Original Glass

Care should be taken when positioning the following types of originals.

An original of a non-standard size:

- The document size cannot be detected automatically. Press the [Paper] key or the [Zoom] key, and then select the desired paper size (p. 4-4) or zoom ratio (p. 4-10).

A highly transparent original (OHP transparencies, translucent paper, etc.):

- Place a blank sheet of paper of the same size over the original.

A book or other three-dimensional object:

- Let the machine scan the contents of the original with the Original Cover or the Automatic Document Feeder raised. Do not attempt to push the Original Glass with excessive force, as a malfunction could result. (The maximum load resistance of the Original Glass is 4-1/2 lb.)

Note

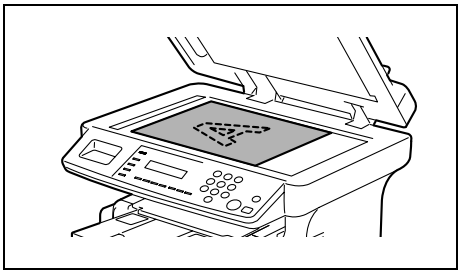
While scanning with the Automatic Document Feeder or Original Cover open, do not look directly at the bright light that may shine through the Original Glass. Although the light that shines through the Original Glass is bright, it is not a laser beam and, therefore, is not as dangerous.

Positioning a Sheet Original

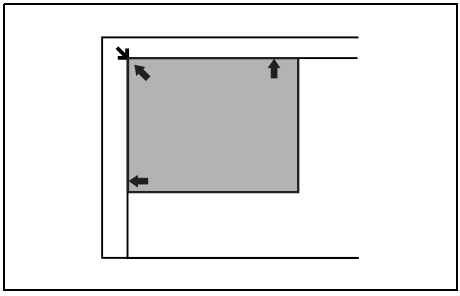
Use the following procedure to position plain paper or an original that is not suitable for use in the Automatic Document Feeder.

1 Raise the Automatic Document Feeder or Original Cover.

2 Place the original face down on the Original Glass.



3 Position the original on the Original Glass so that the corner of the original aligns with the arrow in the upper-left corner of the Original Scales.



4 Gently lower the Automatic Document Feeder or Original Cover.

5 Specify the desired copy settings.

- *"Making Copies" on page 4-1*

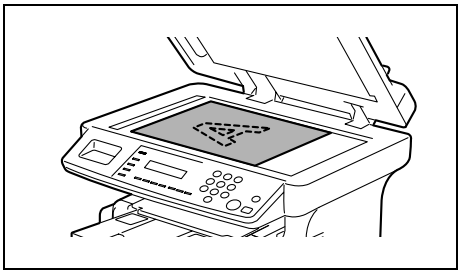
6 Press the [Start] key to start the copy cycle.

Positioning Highly Transparent Originals

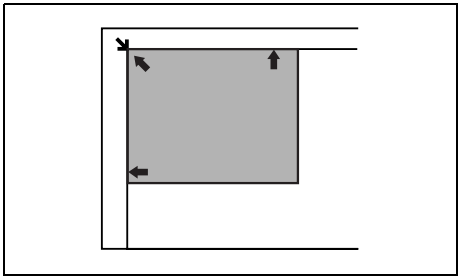
When making a copy from OHP transparencies, translucent paper, or other highly transparent original, position the original as detailed below.

1 Raise the Automatic Document Feeder or Original Cover.

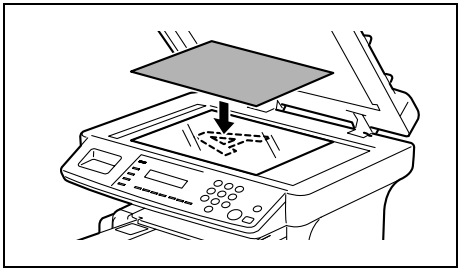
2 Place the original face down on the Original Glass.



3 Position the original on the Original Glass so that the corner of the original aligns with the arrow in the upper-left corner of the Original Scales.



4 Place a blank sheet of paper of the same size over the original.



5 Gently lower the Automatic Document Feeder or Original Cover.

6 Specify the desired copy settings.

- *"Making Copies" on page 4-1*

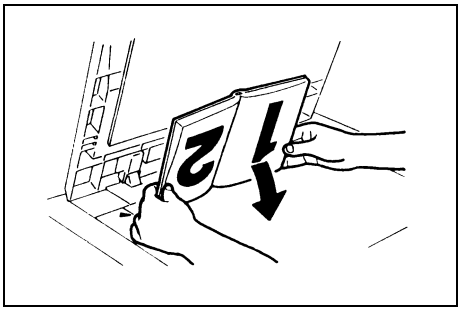
7 Press the [Start] key to start the copy cycle.

Positioning Books

When copying an open book or magazine, position the original as detailed below.

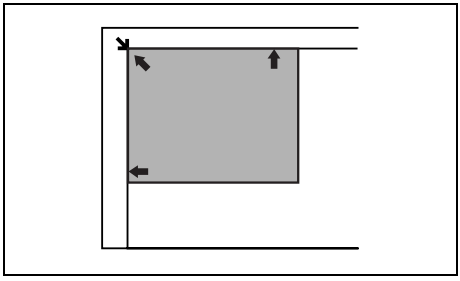
1 Raise the Automatic Document Feeder or Original Cover.

2 Place the original face down on the Original Glass.



Note
Do not place books weighing more than 4-1/2 lb on the Original Glass. In addition, do not press down extremely hard on the original, otherwise the machine may be damaged.

3 Position the original on the Original Glass so that the corner of the original aligns with the arrow in the upper-left corner of the Original Scales.



4 Gently lower the Automatic Document Feeder or Original Cover.

Note
While scanning a thick book or other three-dimensional object with the Automatic Document Feeder or Original Cover open, do not look directly at the bright light that may shine through the Original Glass. Although the light that shines through the Original Glass is bright, it is not a laser beam and, therefore, is not as dangerous.

5 Specify the desired copy settings.

- *"Making Copies" on page 4-1*

6 Press the [Start] key to start the copy cycle.

3.9 Checking the Machine Status

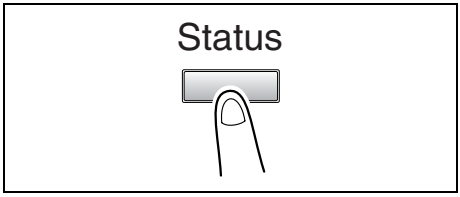
The total number of pages copied and scanned since this machine was installed can be checked.

Checking the Machine Status

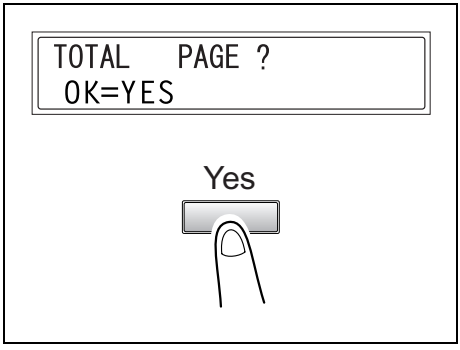
Menu	Item	Description
TOTAL PAGE	TOTAL COUNT	Displays the total number of pages copied since this machine was installed.
	TOTAL SCAN	Displays the total number of pages scanned since this machine was installed. However, the scanned number of pages in copy are not included.

Checking the "TOTAL PAGE" Counts

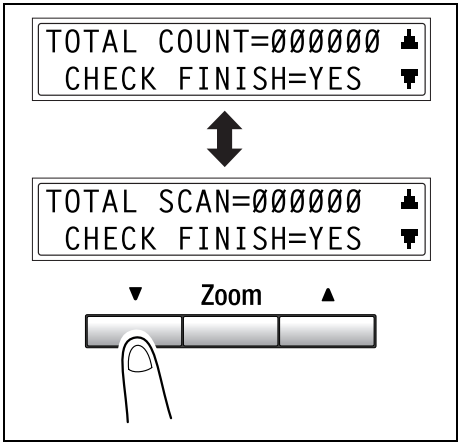
1 Press the [Status] key.



2 Press the [Yes] key.



3 Press the [▼] and [▲] keys to check the “TOTAL COUNT” or “TOTAL SCAN” values.

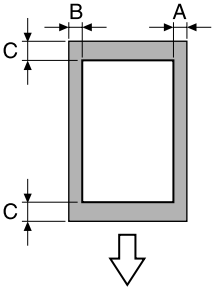


3.10 Print Area

Any part of the image within the area indicated below is not copied.

- A margin 1/4 (at full size) from the leading edge of the paper (A)
- A margin 1/4 (at full size) from the trailing edge of the paper (B)
- A margin 1/4 (at full size) on both sides of the paper (C)

For details on using the machine to print from a computer, refer to the User's Guide for the printer controller.



A: 1/4 (at full size)
B: 1/4 (at full size)
C: 1/4 (at full size)

Paper output direction

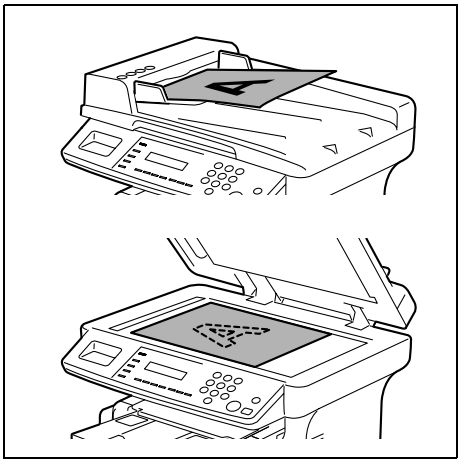
Making Copies 4

4.1 Making a Basic Copy

The following procedure describes how to place an original and make a basic copy of it.

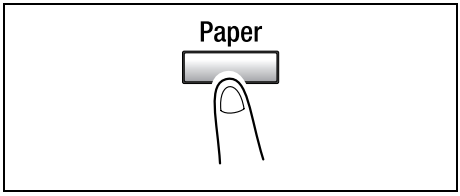
1 Position the original.

- ❍ *"Loading Originals" on page 3-24*



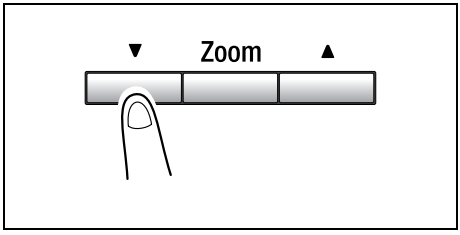
2 Select the paper tray.

- ❍ *"Selecting the Paper" on page 4-4*



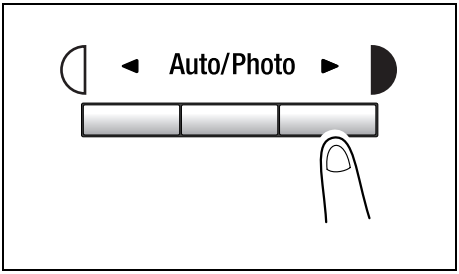
3 Specify the zoom ratio.

- ❍ *"Specifying the Zoom Ratio" on page 4-10*

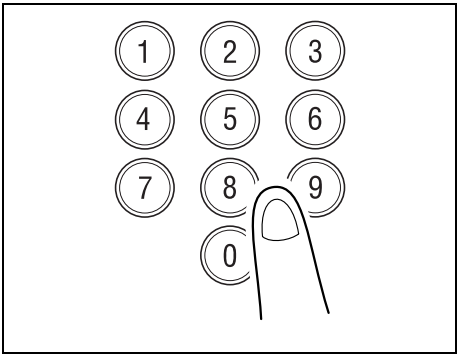


4 Specify the image density.

- ❍ *"Adjusting the Image Density" on page 4-12*

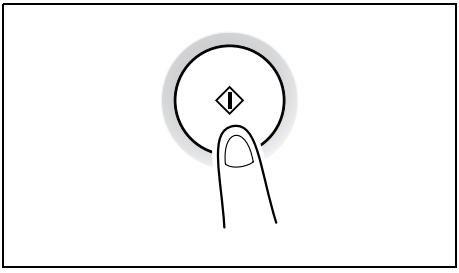


5 Using the 10-Key Pad, enter the number of copies to be made. Any number from 1 to 99 can be entered.



6 Press the [Start] key.
This will start the copy cycle.

- ❍ To stop the copy cycle in mid-operation, press the [Stop] key.
- ❍ To cancel the copy job, press the [No/C] key or the [Panel Reset] key.
- ❍ To restart the copy cycle, press the [Start] key.



4.2 Selecting the Paper

Before making a copy, the tray containing the paper to be used must be selected. Either a paper tray can be selected or paper can be loaded into the Bypass Tray.

Manual Paper Selection

The tray containing the paper you want to use can be manually selected.

Note
The optional Paper Feed Unit is required.

Selecting Manually Fed Paper

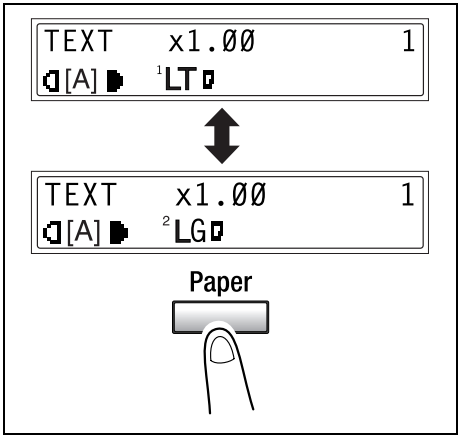
When the desired paper is loaded into the Bypass Tray and the paper size and type are specified, paper loaded into the Bypass Tray is given priority during feeding.

Manually Selecting the Paper Size

1 Position the original.

- *"Loading Originals" on page 3-24*

2 Press the [Paper] key until the tray loaded with the desired paper is selected.



Note
If paper is loaded into the Bypass Tray, first remove it.

If Tray1 is selected, the paper size and paper type must first be specified. For details, refer to "Selecting the "PAPER SOURCE SETUP" Menu" on page 5-12.

3 Make the other necessary settings.

- *"Specifying the Zoom Ratio" on page 4-10*
- *"Adjusting the Image Density" on page 4-12*

4 Using the 10-Key Pad, enter the number of copies to be made, and then press the [Start] key.
This will start the copy cycle.

Specifying the Size and Type of Manually Fed Paper

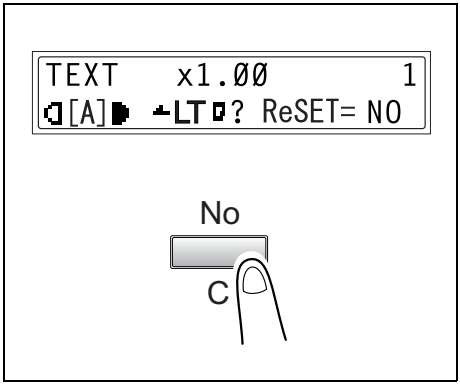
1 Position the original.

- ❍ *"Loading Originals" on page 3-24*

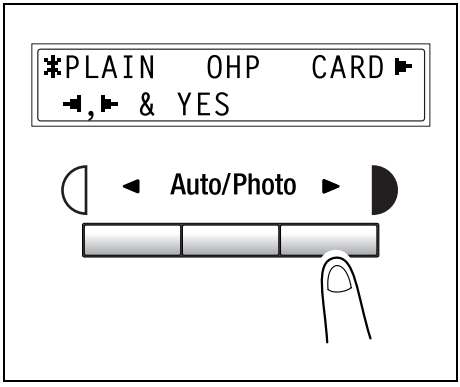
2 Load paper into the Bypass Tray.

- ❍ *"Loading Paper into the Bypass Tray" on page 3-22*

3 The message shown at the right appears. Press the [No/C] key.



4 Press the [◄] and [►] keys until the desired paper type is selected.

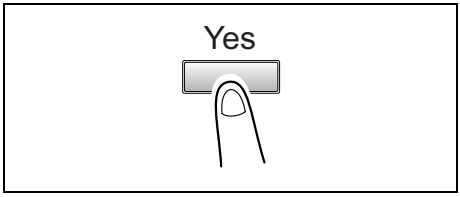


Tip

*Pressing the [◄] and [►] keys moves " * " to select the paper type.*

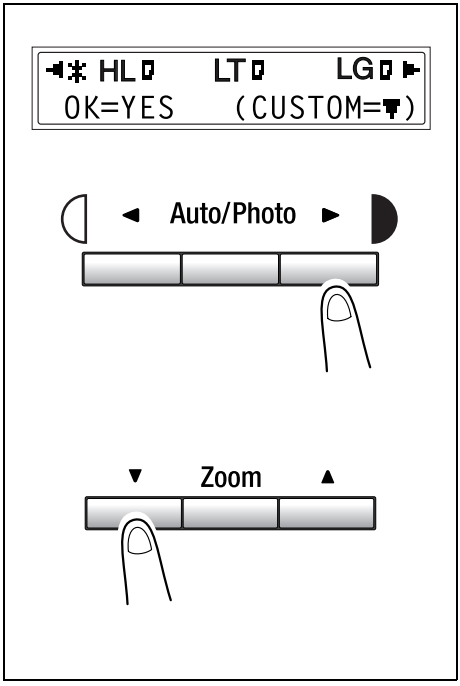
To return to the previous message, press the [No/C] key.

5 Press the [Yes] key.



6 Press the [◄] and [►] keys or press the [▼] key to select the size of paper that is loaded. If "CUSTOM" is not selected, continue with step 10.

- If "CUSTOM" is selected, perform steps 7 through 10.



Note
If "OHP" was selected in step 4, the only paper sizes that can be loaded are Letter (Lengthwise) or A4 (Lengthwise).

Tip
Pressing the [◄] and [►] keys moves " " to select the paper size.

To return to the previous message, press the [No/C] key.

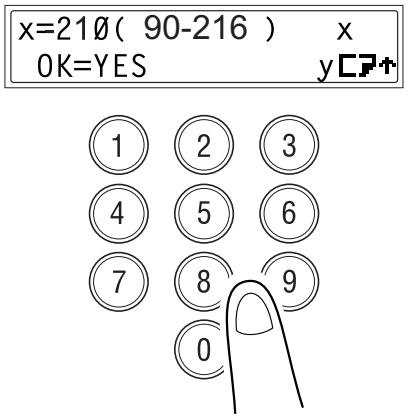
7 Using the 10-Key Pad, enter the width (X) of the paper.

- To clear the entered value, press the [No/C] key.

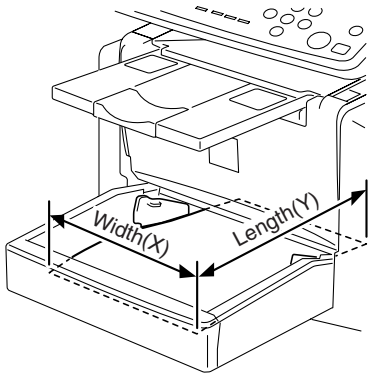
Note
The width can range from 90 mm (3-1/2) to 216 mm (8-1/2).

When entering the paper size, refer to the diagram on the right side of the screen to check which sides of the paper are the width and the length.

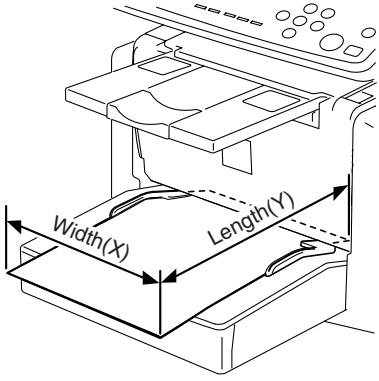
Tip
Enter the value by mm using the 10-key Pad. Refer to the conversion rate below.
1 inch = 25.4 mm



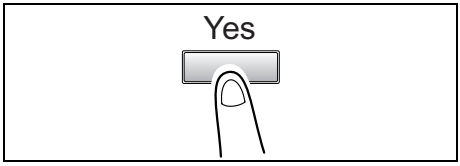
Tray 1



Bypss Tray



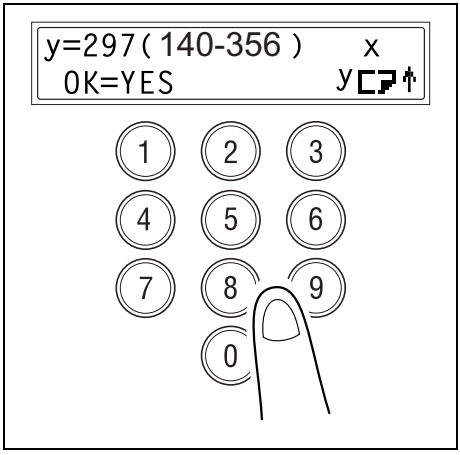
8 Press the [Yes] key.



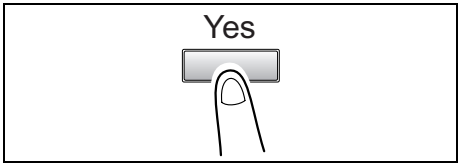
9 Using the 10-Key Pad, enter the length (Y) of the paper.

Note
The length can range from 140 mm (5-1/2) to 356 mm (14).

Tip
Enter the value by mm using the 10-key Pad. Refer to the conversion rate below.
1 inch = 25.4 mm



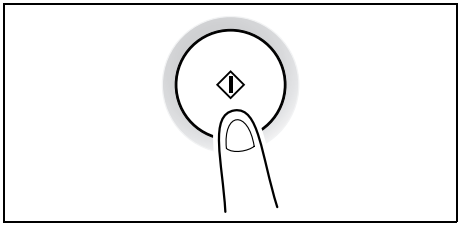
10 Press the [Yes] key.



11 Make the other necessary settings.

- *"Specifying the Zoom Ratio" on page 4-10*
- *"Adjusting the Image Density" on page 4-12*

12 Using the 10-Key Pad, enter the number of copies to be made, and then press the [Start] key.



Tip

To change the number of copies to be made, remove the paper from the Bypass Tray and then reload it. Repeat steps 11 and 12.

Note

The Bypass Tray can be loaded with a maximum of 1 envelope, 1 OHP transparency, 1 card, or 10 sheets of plain paper.

4.3 Specifying the Zoom Ratio

By specifying a zoom ratio, the copy can be enlarged or reduced.

Zoom Ratio Settings

Zoom Ratio Settings	Description
Fixed ratios	• The following optimum zoom ratios are available for making copies from commonly used original sizes to standard paper sizes. • × 0.25 • × 0.50 • × 0.64 (LT → HL) • × 0.78 (LG → LT) • × 1.29 (HL → LT) • × 1.54 (HL → LG) • × 2.00 • × 4.00
Ratios set using the Zoom [▼] and [▲] keys	Pressing the [▼] or [▲] key increases or decreases the zoom ratio in × 0.01 increments. The ratio can range from × 0.25 to × 4.00.
Full Size	This setting makes a copy the same size as the original (× 1.00).

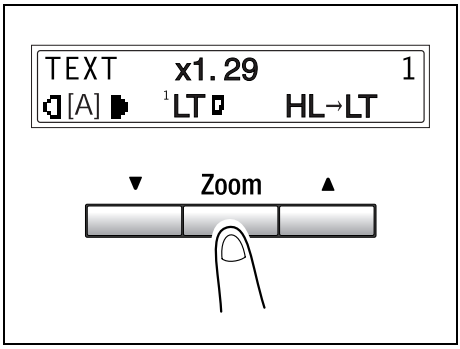
Setting the Zoom Ratio

1 Position the original.

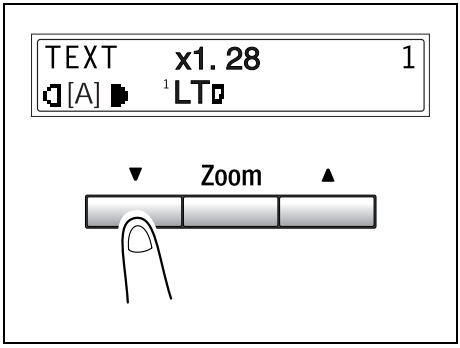
- *"Loading Originals" on page 3-24*

2 Press the [Zoom] key until the desired fixed ratio is selected.

- Each press of the [Zoom] key changes the setting.



- To specify a zoom ratio other than a fixed ratio, press the [▼] and [▲] keys until the desired zoom ratio is specified. Pressing these keys change the ratio in × 0.01 increments.



Tip
To quickly specify the desired zoom ratio, select the nearest fixed ratio, and then press the [▼] and [▲] keys until the desired zoom ratio is specified.

3 Make the other necessary settings.

- *"Adjusting the Image Density" on page 4-12*

4 Using the 10-Key Pad, enter the number of copies to be made, and then press the [Start] key.

4.4 Adjusting the Image Density

The image density setting can be adjusted in two broad modes, “Text” and “Photo”.

Image Density Setting

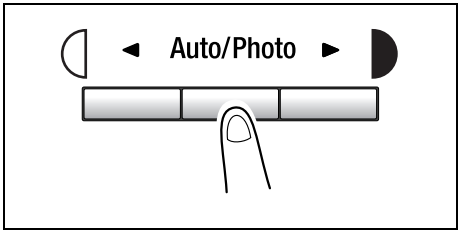
- Text mode:
  The image density can be adjusted either automatically (Auto) or manually in nine steps.
  - ❍ The image density is adjusted automatically according to the original from which a copy is to be made.
  - ❍ Manual image density adjustment:
    The image density can be adjusted to one of nine levels.
    To reduce bleed-throughs when copying newspapers and magazines, press the [◄] key to select a lighter setting. To reproduce faint colors in brighter parts of the image, press the [►] key to select a darker setting.
    Selecting a darker setting could result in a background image being reproduced on the copy, while selecting a lighter setting could make the copy image itself too light: Select the appropriate level according to your original.
- Photo mode:
  Select “Photo” when making a copy from an original having large halftone images, such as photos.

Setting the Image Density

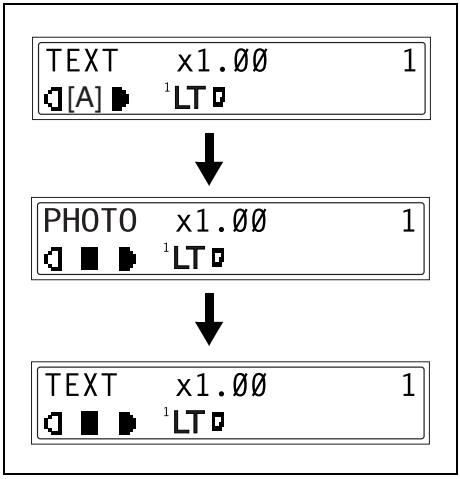
1 Position the original.

- ❍ *“Loading Originals” on page 3-24*

2 Press the [Auto/Photo] key on the control panel to select the desired mode.



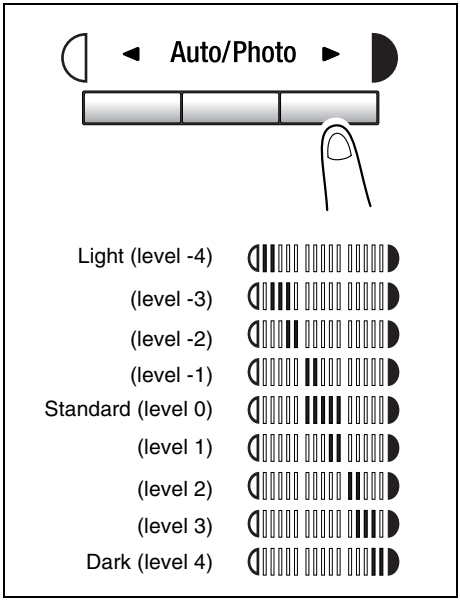
- Each press of the [Auto/Photo] key changes the setting as shown at the right.
  If Text mode is selected, "TEXT" is displayed.
  If the Auto setting is selected, "[A]" is displayed.
  If Photo mode is selected, "PHOTO" is displayed.



Note
In the Photo mode, the Auto setting cannot be selected.

3 If you want to adjust the image density manually, press the [◄] or [►] key to select the desired setting.

Tip
The displays for manually selected image densities are shown at the right.



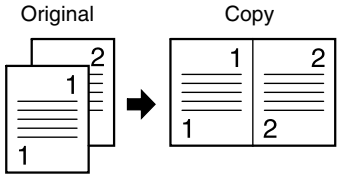
4 Make the other necessary settings.

- *"Selecting the Paper" on page 4-4*
- *"Specifying the Zoom Ratio" on page 4-10*

5 Using the 10-Key Pad, enter the number of copies to be made, and then press the [Start] key.

4.5 Making 2in1 Copies

Two sheets of single-sided documents can be copied onto one double-sided sheet.

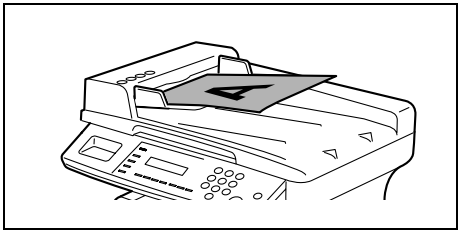


Note
The optional Automatic Document Feeder is required.

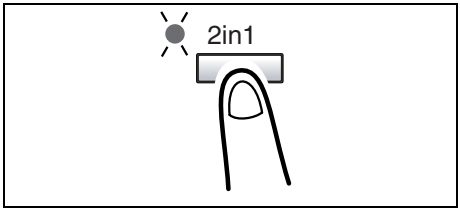
Specifying Settings for 2in1 Copies

1 Position the original.

Note
Be sure to position the documents as shown in the illustration at the right.



2 Press the [2in1] key, and then check that the indicator lights up.



3 Make the other necessary settings.

- *"Selecting the Paper" on page 4-4*
- *"Adjusting the Image Density" on page 4-12*

4 Using the 10-Key Pad, enter the number of copies to be made, and then press the [Start] key.

4.6 Finishing Copies

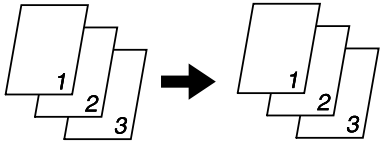
When printing two or more sets, each set can be printed (sorted) in order.

Note
In order to sort the printed pages, the Automatic Document Feeder is required.

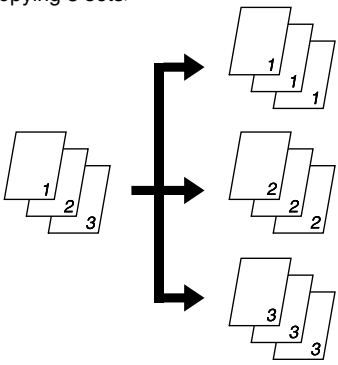
Finishing methods

- Non-Sort:
  The copies are stacked on top of each other as they are made

<Copying 1 set>

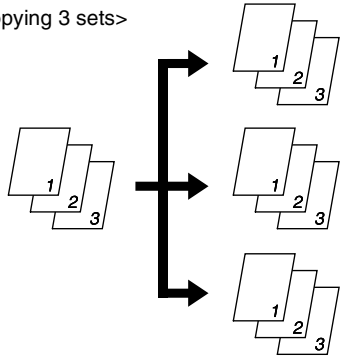


<Copying 3 sets>



- Sort:
  Documents containing multiple pages can be copied and automatically separated into the individual sets.

<Copying 3 sets>

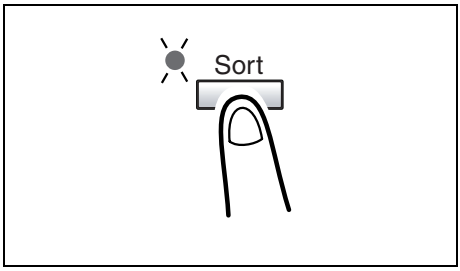


Specifying Sorting

1 Load the originals in the Automatic Document Feeder.

- *"Loading Originals" on page 3-24*

2 Press the [Sort] key, and then check that the indicator lights up.



Note
If the Sort indicator is not lit, the Non-Sort setting is selected.

3 Make the other necessary settings.

- *"Selecting the Paper" on page 4-4*
- *"Specifying the Zoom Ratio" on page 4-10*
- *"Adjusting the Image Density" on page 4-12*

4 Using the 10-Key Pad, enter the number of copies to be made, and then press the [Start] key.

Using the Utility Mode 5

5.1 Utility Mode

There are four menus in the Utility mode.

No.	Name	Description
1	MACHINE SETTING	Used to specify settings for the machine's operating environment.
2	PAPER SOURCE SETUP	Used to specify the size and type of paper loaded in Tray1. In addition, auto tray switching can be enabled for each tray.
3	USER MANAGEMENT	Used to specify settings after the drum cartridge is replaced.
4	COPY SETTING	Used to specify the default settings for each copy function.
5	NETWORK SETTING	Available only if the optional Network Interface Card NC-501 is installed. For details, refer to the User's Guide for the Network Interface Card NC-501.

5.2 Specifying the Machine Settings

From the "MACHINE SETTING" menu, various settings for the machine's operating environment can be specified. Refer to the following table for details on each function.

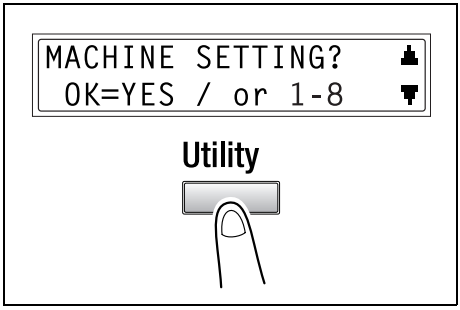
No.	Name	Description
1	AUTO PANEL RESET	Whether the Auto Panel Reset function is disable or the time (0.5 min, 1 min, 2 min, 3 min, 4 min, or 5 min) until the machine is reset after finishing copying/printing or after performing the last operation can be selected. If the Auto Panel Reset function is enabled, all functions are automatically reset to their default settings. • The factory default setting is 1 min.
2	ENERGY SAVE MODE	If the machine performs no operations for a set length of time, it will automatically enter the Energy Save mode. The length of time until the machine enters Energy Save mode can be set between 1 and 240 min (in 1 min increments). • The factory default setting is 15 min.
3	DENSITY (ADF)	The scanning density when using the Automatic Document Feeder can be adjusted. Mode 1: For printing lighter copies of dark documents to avoid darkening of copies. Mode 2: For printing copies with same density as documents. • The factory default setting is "Mode 1".
4	DENSITY (BOOK)	The density when scanning from the Original Glass can be adjusted. Mode 1: For printing copies with same density as documents. Mode 2: For printing lighter copies of dark documents to avoid darkening of copies. • The factory default setting is "Mode 1".
5	PRINT DENSITY	The copy/print density can be adjusted to one of six levels between –3 and +2. With the normal print density at 0, choose a smaller number for a lighter print or choose a higher number for a darker print. • The factory default setting is "0" (Normal).
6	LCD CONTRAST	The brightness of the display can be set to one of four levels between –1 and +2. • The factory default setting is "0" (Normal).

No.	Name	Description
7	LANGUAGE	The display language can be selected. • The factory default setting is “English”.
8	LAMP OFF TIME	The time until the exposure lamp goes off can be adjusted. Mode 1: When four hours have passed since the last operation was performed Mode 2: When the machine enters Energy Save mode • The factory default setting is “Mode 1”.

Selecting the “MACHINE SETTING” Menu

1 Press the [Utility] key.

“MACHINE SETTING” appears.



2 From the 10-Key Pad, press the key ([1] to [8]) for the MACHINE SETTING function that you wish to set.

❍ The MACHINE SETTING functions are as follows:
1 AUTO PANEL RESET
2 ENERGY SAVE MODE
3 DENSITY (ADF)
4 DENSITY (BOOK)
5 PRINT DENSITY
6 LCD CONTRAST
7 LANGUAGE
8 LAMP OFF TIME

Tip

To quit changing the machine settings, press the [No/C] key. “STOP SETTING?” appears. Press the [Yes] key to quit changing the settings.

Specifying the Setting for "AUTO PANEL RESET"

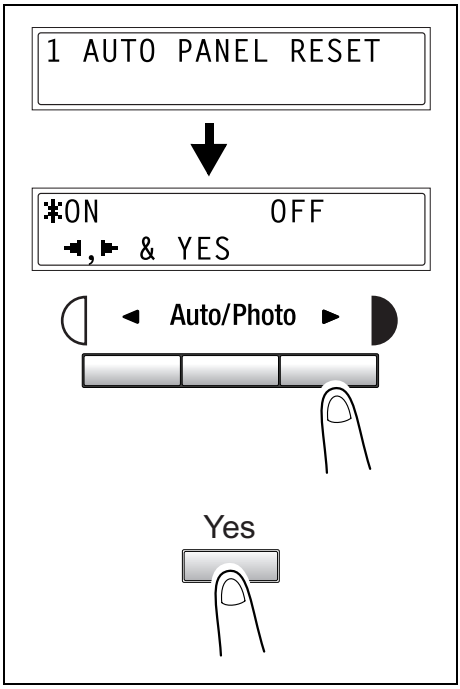
1 Select "AUTO PANEL RESET".

- Refer to *"Selecting the "MACHINE SETTING" Menu" on page 5-3*.

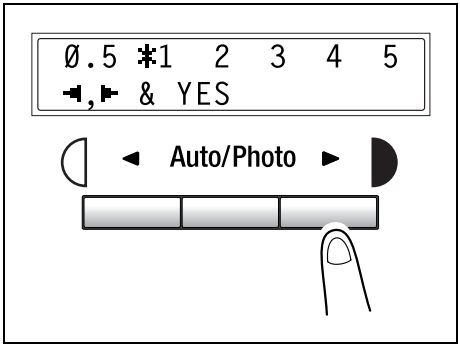
2 Press the [◄] and [►] keys to select either "ON" or "OFF", and then press the [Yes] key.

If "OFF" was selected, "MACHINE SETTING" appears again.

Note
If "OFF" was selected, the Auto Panel Reset function is disabled.



3 Press the [◄] and [►] keys to select the desired time period (min).



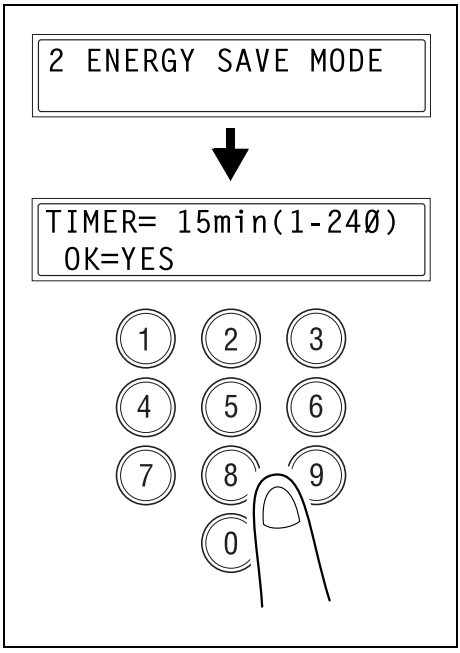
4 Press the [Yes] key.

Specifying the Setting for "ENERGY SAVE MODE"

1 Select "ENERGY SAVE MODE".

- Refer to *"Selecting the "MACHINE SETTING" Menu" on page 5-3*.

2 Use the 10-Key Pad to specify the desired length of time until the copier enters Energy Save mode.



Tip

The timer can be set between 1 min and 240 min.

If an incorrect value is entered, press the [No/C] key, and then enter the correct value.

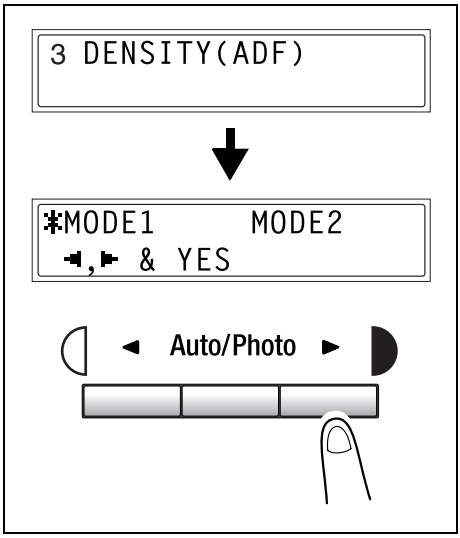
3 Press the [Yes] key.

Specifying the Setting for "DENSITY (ADF)"

1 Select "DENSITY (ADF)".

- Refer to *"Selecting the "MACHINE SETTING" Menu" on page 5-3*.

2 Press the [◄] and [►] keys to select either "Mode 1" or "Mode 2".



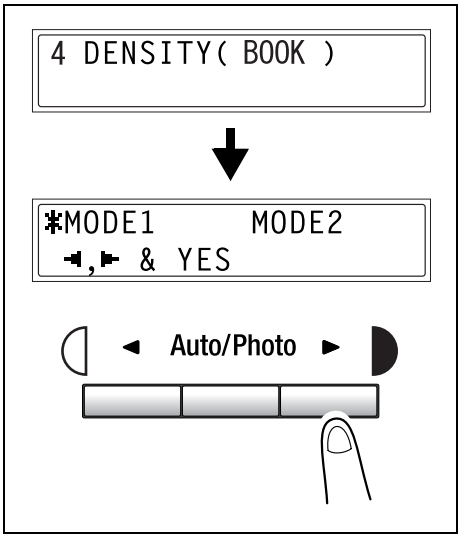
3 Press the [Yes] key.

Specifying the Setting for "DENSITY (BOOK)"

1 Select "DENSITY (BOOK)".

- Refer to *"Selecting the "MACHINE SETTING" Menu" on page 5-3*.

2 Press the [◄] and [►] keys to select either "Mode 1" or "Mode 2".



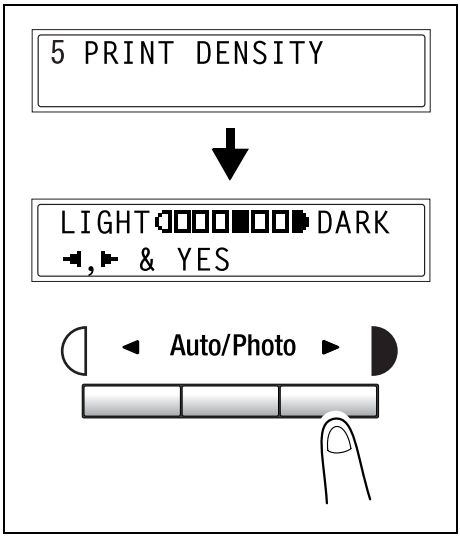
3 Press the [Yes] key.

Specifying the Setting for "PRINT DENSITY"

1 Select "PRINT DENSITY".

- Refer to *"Selecting the "MACHINE SETTING" Menu" on page 5-3*.

2 Press the [◄] and [►] keys to select one of the seven print density levels between "LIGHT" and "DARK".



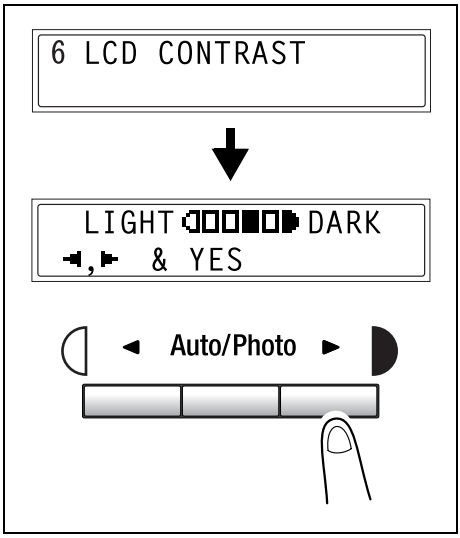
3 Press the [Yes] key.

Specifying the Setting for "LCD CONTRAST"

1 Select "LCD CONTRAST".

- Refer to *"Selecting the "MACHINE SETTING" Menu" on page 5-3*.

2 Press the [◄] and [►] keys to select one of the four display contrast levels between "LIGHT" and "DARK".



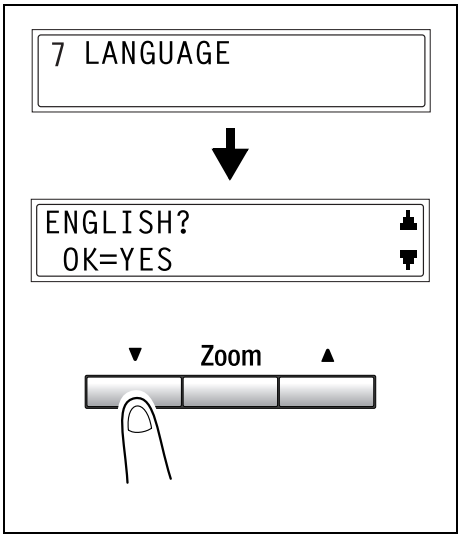
3 Press the [Yes] key.

Specifying the Setting for "LANGUAGE"

1 Select "LANGUAGE".

- Refer to *"Selecting the "MACHINE SETTING" Menu" on page 5-3*.

2 Press the [▼] and [▲] keys to select the desired language.



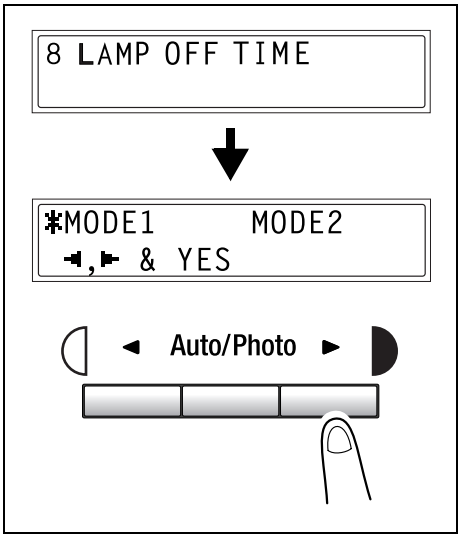
3 Press the [Yes] key.

Specifying the Setting for "LAMP OFF TIME"

1 Select "LAMP OFF TIME".

- Refer to *"Selecting the "MACHINE SETTING" Menu" on page 5-3*.

2 Press the [◄] and [►] keys to select either "Mode 1" or "Mode 2".



3 Press the [Yes] key.

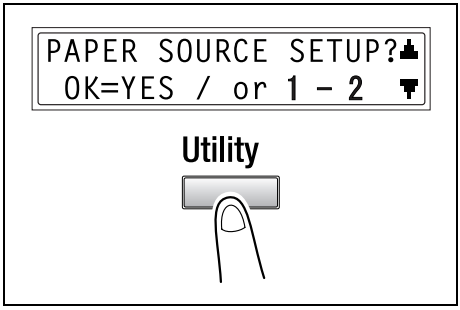
5.3 Setting Up the Paper Sources

From the “PAPER SOURCE SETUP” menu, the various settings for each paper tray can be specified.

No.	Name	Description
1	TRAY1 PAPER	The type and size of paper loaded in Tray1 can be specified. • The manufacturer’s default settings are “PLAIN” and “Letter ▯ (Lengthwise)”.
2	TRAY SETTING	Whether or not auto tray switching is enabled for each paper tray can be specified. (p. 3-15) • The factory default setting is “CONTINUOUS”.

Selecting the “PAPER SOURCE SETUP” Menu

1 Press the [Utility] key twice. “PAPER SOURCE SETUP” appears.



2 From the 10-Key Pad, press the key ([1] or [2]) for the PAPER SOURCE SETUP function that you wish to set.

❍ The PAPER SOURCE SETUP functions are as follows:
1 TRAY1 PAPER
2 TRAY SETTING

Tip
To quit setting up the paper sources, press the [No/C] key. “STOP SETTING?” appears. Press the [Yes] key to quit changing the settings.

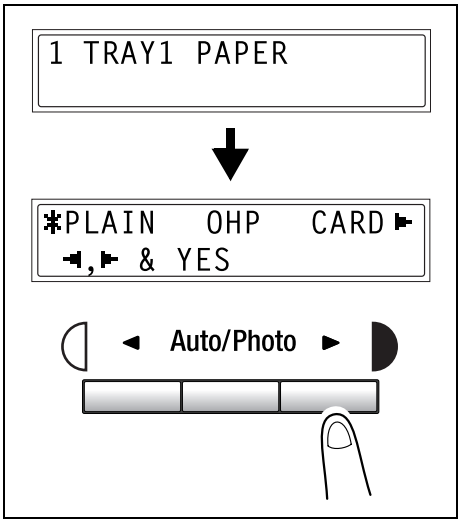
Specifying the Setting for "TRAY1 PAPER"

1 Select "TRAY1 PAPER".

- Refer to *"Selecting the "PAPER SOURCE SETUP" Menu" on page 5-12*.

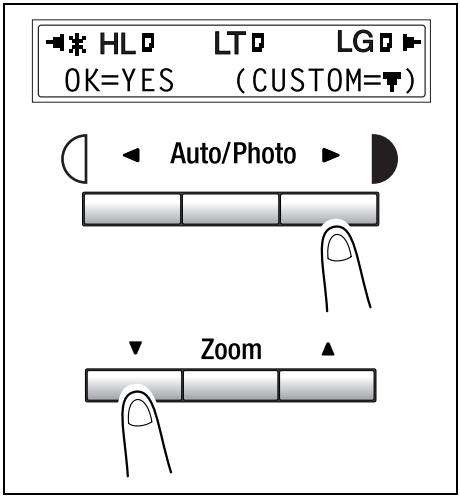
2 Press the [◄] and [►] keys until the type of paper loaded is selected.

3 Press the [Yes] key.



4 Press the [◄] and [►] keys or press the [▼] key to select the size of paper that is loaded. If "CUSTOM" is not selected, continue with step 8.

- If "CUSTOM" is selected, perform steps 5 through 7.



Note
If "OHP" was selected, the only paper sizes that can be loaded are Letter ▯ (Lengthwise) and A4 ▯ (Lengthwise).

Tip
*Pressing the [◄] and [►] keys moves " * " to select the paper size.*

To return to the previous message, press the [No/C] key.

5 Using the 10-Key Pad, enter the width (X) of the loaded paper.

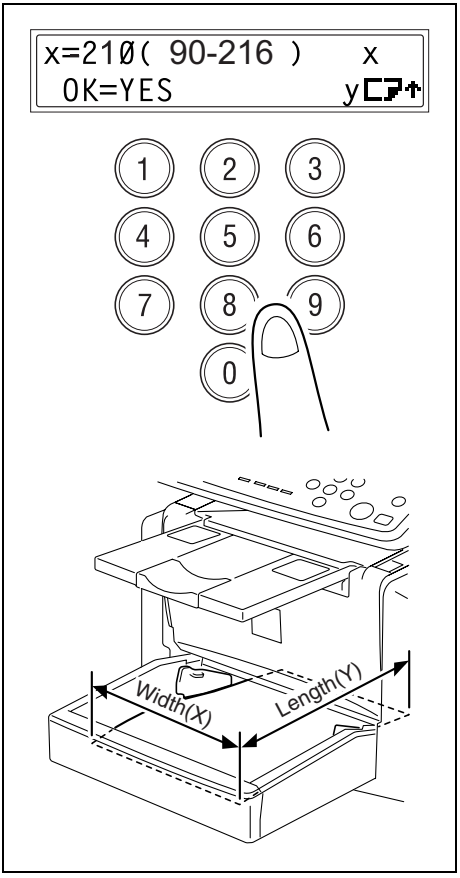
- To clear the entered value, press the [No/C] key.

Note
The paper width can range from 90 mm (3-1/2) to 216 mm (8-1/2).

When entering the paper size, refer to the diagram on the right side of the screen to check which sides of the paper are the width and the length.

Tip
Enter the value by mm using the 10-key Pad. Refer to the conversion rate below.
1 inch = 25.4 mm

6 Press the [Yes] key.

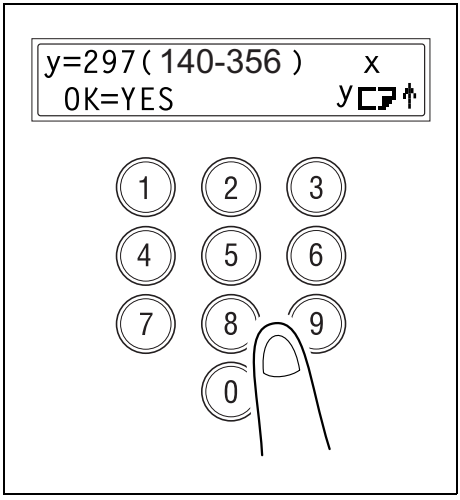


7 Using the 10-Key Pad, enter the length (Y) of the loaded paper.

- To clear the entered value, press the [No/C] key.

Note
The paper length can range from 140 mm (5-1/2) to 356 mm (14).

Tip
Enter the value by mm using the 10-key Pad. Refer to the conversion rate below.
1 inch = 25.4 mm



8 Press the [Yes] key.

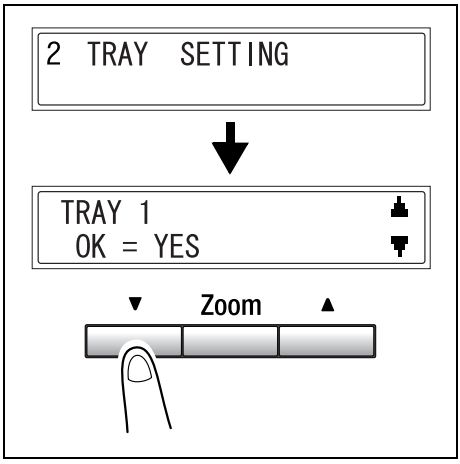
Specifying the Setting for "TRAY SETTING"

1 Select "TRAY SETTING".

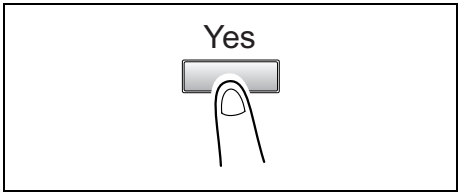
- Refer to *"Selecting the "PAPER SOURCE SETUP" Menu" on page 5-12*.

2 Press the [▼] and [▲] key to select a tray.

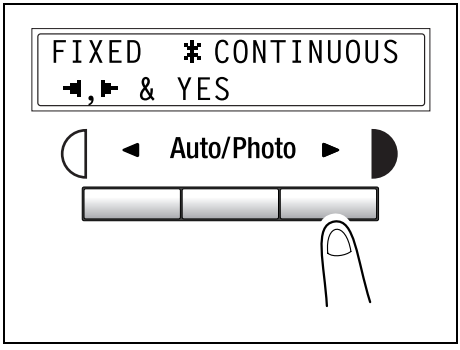
Note
A tray can be selected only if the optional Paper Feed Cassette is installed.



3 Press the [Yes] key.



4 Press the [◄] and [►] keys to select either "FIXED" (auto tray switching disabled) or "CONTINUOUS" (auto tray switching enabled).



5 Press the [Yes] key.

5.4 Specifying User Management Settings (“USER MANAGEMENT” Menu)

From the “USER MANAGEMENT” menu, the various functions which must be specified after the drum cartridge is replaced are available.

“USER MANAGEMENT” menu:

No.	USER MANAGEMENT	Description
1	CHANGE D/C	This function is used to specify when the drum cartridge will need to be replaced.

Tip

For details on replacing the drum cartridge, refer to page 6-10.

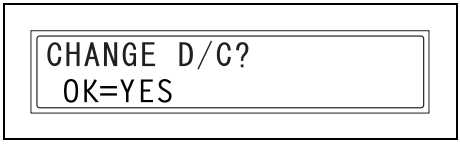
To select the “USER MANAGEMENT” menu

1 Press the [Utility] key three times.

“USER MANAGEMENT” appears.

2 Press the [Yes] key.

3 Press the [Yes] key.



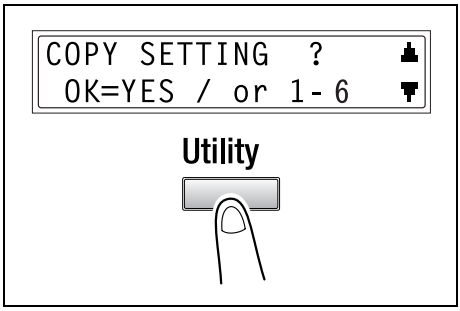
5.5 Specifying Copy Settings

When the machine is turned on or the [Panel Reset] key is pressed, the machine is automatically reset to its initial mode. By changing the default settings, you can change the initial mode. Refer to the following table for the default settings for each function.

No.	Name	Description
1	PAPER PRIORITY	The tray that is given priority can be set to either “Tray1” or “Tray2”. • The factory default setting is “TRAY1”.
2	DENSITY PRIORITY	The density that is selected when the machine is turned on or the [Panel Reset] key is pressed can be set to “AUTO”, “MANUAL” or “PHOTO”. • The factory default setting is “AUTO”.
3	DENSITY LEVEL (A) *(A) : Auto	The default Auto density level setting can be set to “LIGHT (–1)”, “NORMAL (0)” or “DARK (+1)”. • The factory default setting is “NORMAL (0)”.
4	DENSITY LEVEL (M) *(M) : Manual	The default manual density level setting can be set to one of nine levels between –4 and +4, with the normal print density at 0. If a smaller number (toward –) is selected, the print becomes lighter. If a larger number (toward +) is selected, the print becomes darker. • The factory default setting is “NORMAL (0)”.
5	OUTPUT PRIORITY	The finishing setting that is selected when the machine is turned on or the [Panel Reset] key is pressed can be set to “NON” or “SORT”. • The factory default setting is “NON”.
6	RESOLUTION	The default resolution when scanning with the Automatic Document Feeder can be set to “600 dpi × 300 dpi” or “600 dpi × 600 dpi”. • The factory default setting is “600 dpi × 300 dpi”.

Selecting the "COPY SETTING" Menu

1 Press the [Utility] key four times.
"COPY SETTING" appears.



2 From the 10-Key Pad, press the key ([1] to [6]) for the COPY SETTING function that you wish to set.

- The COPY SETTING functions are as follows:
  1 PAPER PRIORITY
  2 DENSITY PRIORITY
  3 DENSITY LEVEL (A)
  4 DENSITY LEVEL (M)
  5 OUTPUT PRIORITY
  6 RESOLUTION

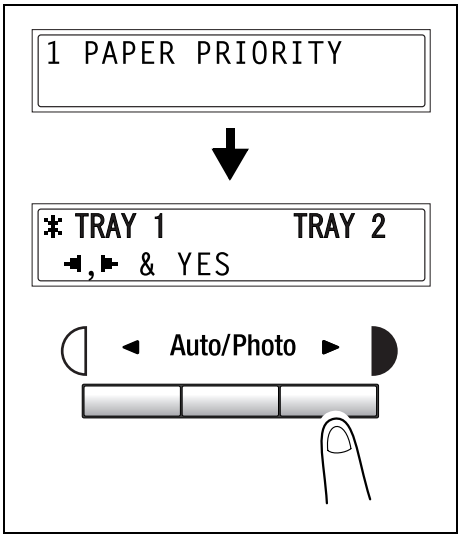
Tip
To quit changing the copy settings, press the [No/C] key. "STOP SETTING?" appears. Press the [Yes] key to quit changing the settings.

Specifying the Setting for "PAPER PRIORITY"

1 Select "PAPER PRIORITY".

- Refer to *"Selecting the "COPY SETTING" Menu" on page 5-19*.

2 Press the [◄] and [►] keys to select either "TRAY1" or "TRAY2".



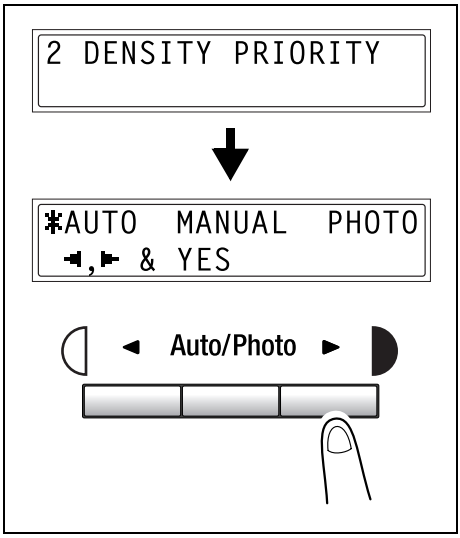
3 Press the [Yes] key.

Specifying the Setting for "DENSITY PRIORITY"

1 Select "DENSITY PRIORITY".

- Refer to *"Selecting the "COPY SETTING" Menu" on page 5-19*.

2 Press the [◄] and [►] keys to select either "AUTO", "MANUAL" or "PHOTO".



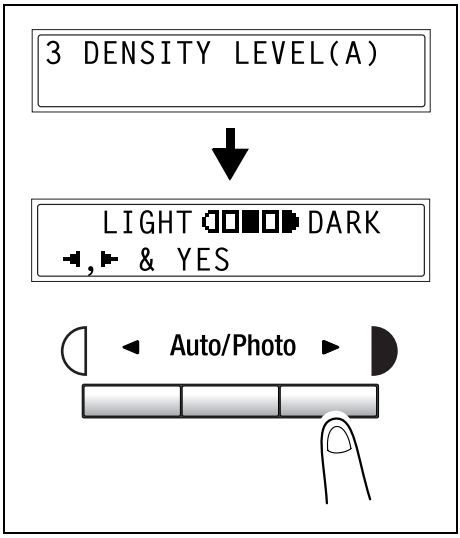
3 Press the [Yes] key.

Specifying the Setting for "DENSITY LEVEL (A)"

1 Select "DENSITY LEVEL (A)".

- Refer to *"Selecting the "COPY SETTING" Menu" on page 5-19*.

2 Press the [◄] and [►] keys to select one of the three print density levels between "LIGHT" and "DARK".



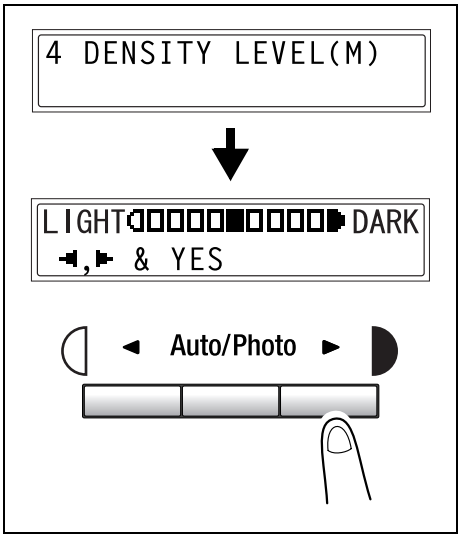
3 Press the [Yes] key.

Specifying the Setting for "DENSITY LEVEL (M)"

1 Select "DENSITY LEVEL (M)".

- Refer to *"Selecting the "COPY SETTING" Menu" on page 5-19*.

2 Press the [◄] and [►] keys to select one of the nine print density levels between "LIGHT" and "DARK".



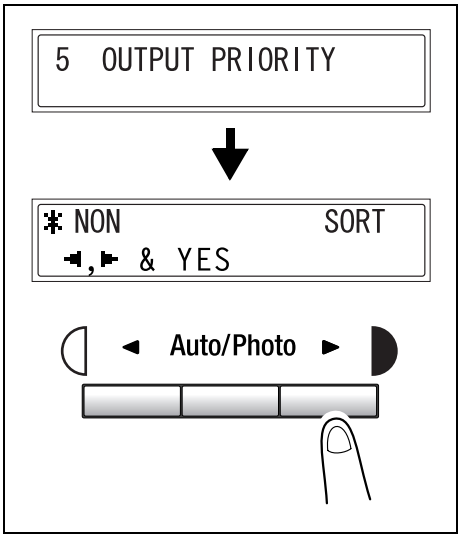
3 Press the [Yes] key.

Specifying the Setting for "OUTPUT PRIORITY"

1 Select "OUTPUT PRIORITY".

- Refer to *"Selecting the "COPY SETTING" Menu" on page 5-19*.

2 Press the [◄] and [►] keys to select either "NON" or "SORT".



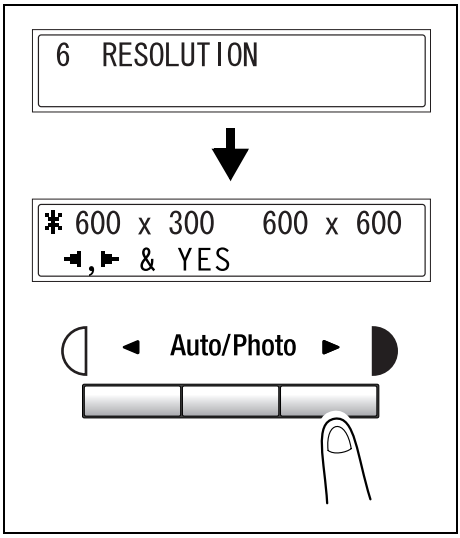
3 Press the [Yes] key.

Specifying the Setting for "RESOLUTION"

1 Select "RESOLUTION".

- Refer to *"Selecting the "COPY SETTING" Menu" on page 5-19*.

2 Press the [◄] and [►] keys to select either "600 × 300" or "600 × 600".

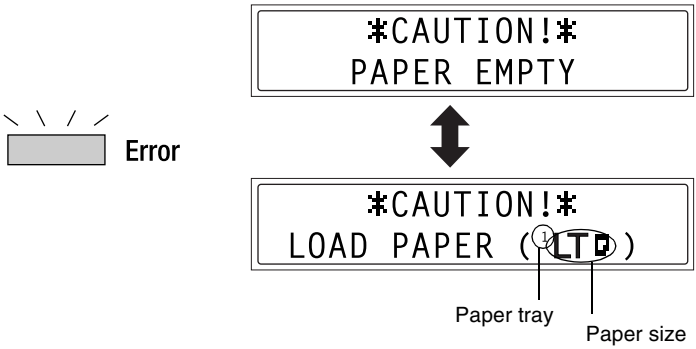


3 Press the [Yes] key.

When a Message Appears 6

6.1 When the Message “PAPER EMPTY” Appears

When the currently selected paper tray runs out of paper, the message shown below appears, and printing cannot continue.

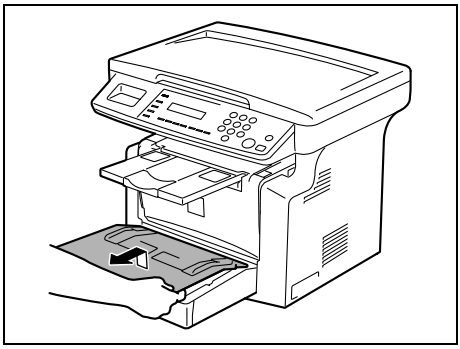


Check the paper tray that has run out of paper, and then supply paper according to the following procedures.

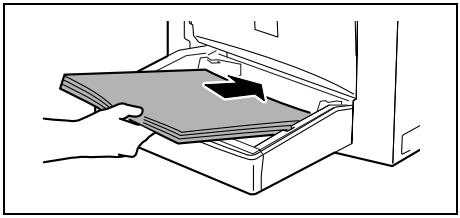
Indicator	Paper Tray
1	Tray1
2	Tray2
⏏	Bypass Tray

Loading Paper into Tray1

1 Remove the Bypass Tray.



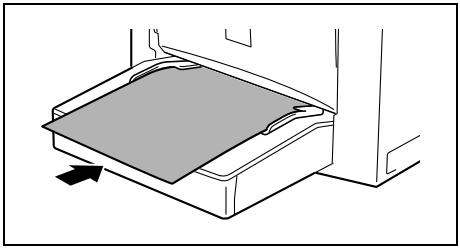
2 Load the paper in the tray so that the front side of the paper (the side facing up when the package was unwrapped) faces up.



3 Attach the Bypass Tray in its original position.

Loading Paper into the Bypass Tray

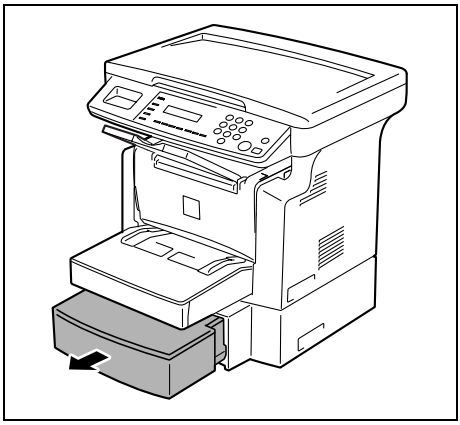
1 Load the paper so that the front side of the paper (the side facing up when the package was unwrapped) faces up.



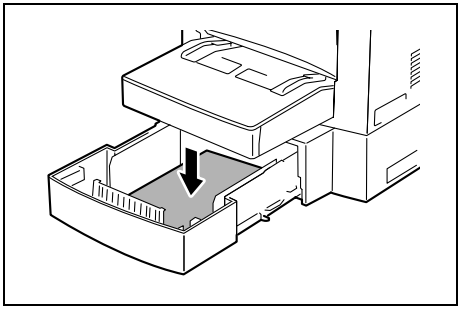
Note
The Bypass Tray can be loaded with a maximum of 1 envelope, 1 OHP transparency, 1 card, or 10 sheets of plain paper.

Loading Paper into Tray2 (Optional)

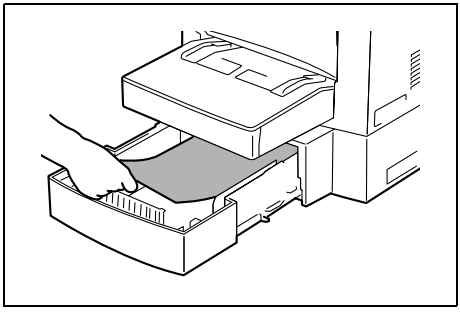
1 Pull out the drawer for Tray2.



2 Remove the drawer cover, and then press down on the paper-lifting plate until it locks into place.



3 Load the paper into the drawer so that the front side of the paper (the side facing up when the package was unwrapped) faces up.

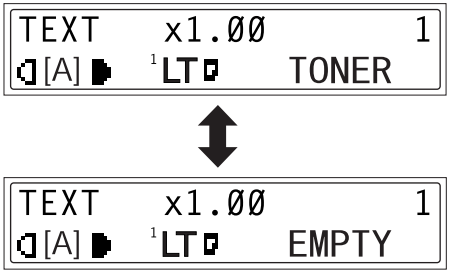


4 Attach the drawer cover, and then return the drawer for Tray2 to its original position.

6.2 When the Message “TONER EMPTY” Appears

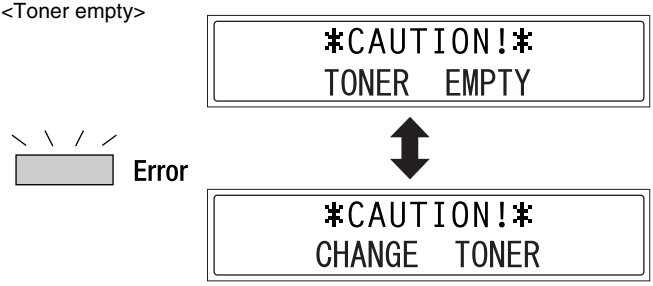
When toner is about to run out, the message shown below appears, indicating that the toner is almost empty. When this message appears, replace the toner cartridge with a new one as soon as possible. If you continue making copies/printing, the toner will be emptied, and copies/printing can no longer be made.

<Toner nearly empty>



When the toner is empty, the message shown below appears and making copies or printing can no longer be performed. Replace the toner cartridge.

<Toner empty>



CAUTION

Used Toner Cartridges

- In order to prevent the used Toner Cartridge from dirtying anything, keep it in the box.
- Dispose of the used Toner Cartridge according to your local regulations.

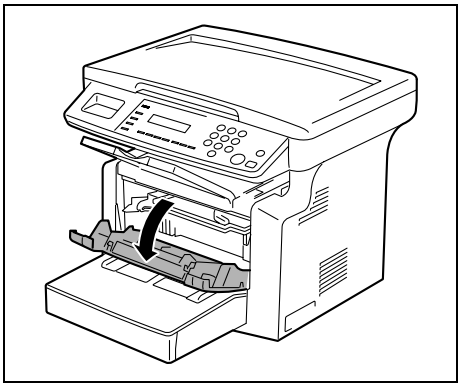
Note

Use only the toner that has been manufactured specifically for this machine. Never use any other types of toner, as a malfunction could result. For details, contact your service representative.

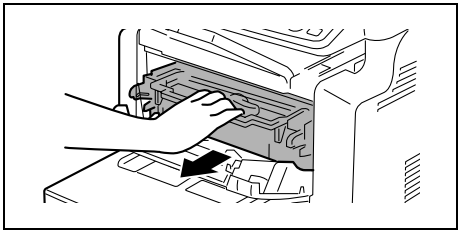
Do not use a toner cartridge of a different type.

Replacing the Toner Cartridge

1 Open the Front Cover.



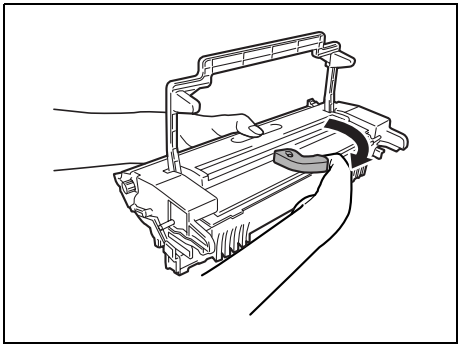
2 Grab the handle of the Imaging Cartridge, and then pull it toward you to remove the cartridge.



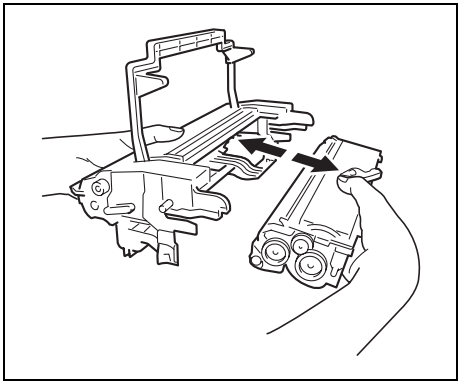
Note

Since the Imaging Cartridge can easily be damaged by light, exposing the cartridge to light for a long period of time will result in decreased image quality.

3 Move the lever in the direction of the arrow to release the lock.



4 Remove the Toner Cartridge from the Drum Cartridge.



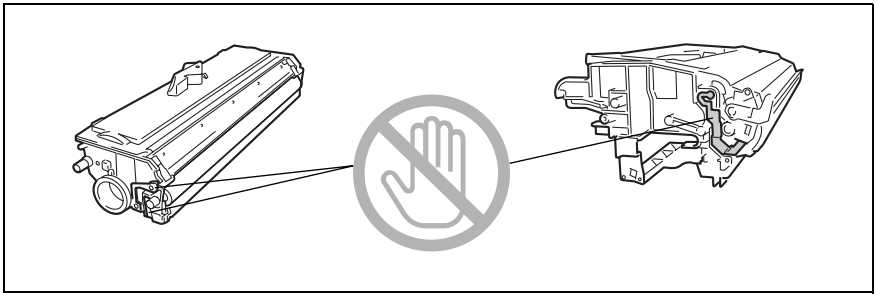
...

Note

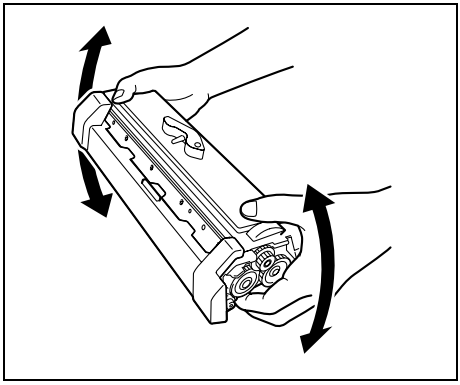
When separating the Toner Cartridge from the Drum Cartridge, do not tilt the cartridge, otherwise toner may spill.

Do not touch the PC drum under the flap of the Drum Cartridge, otherwise decreased image quality may result.

Do not touch any metal parts of the Drum Cartridge or Toner Cartridge, otherwise the units may be damaged by static electricity.

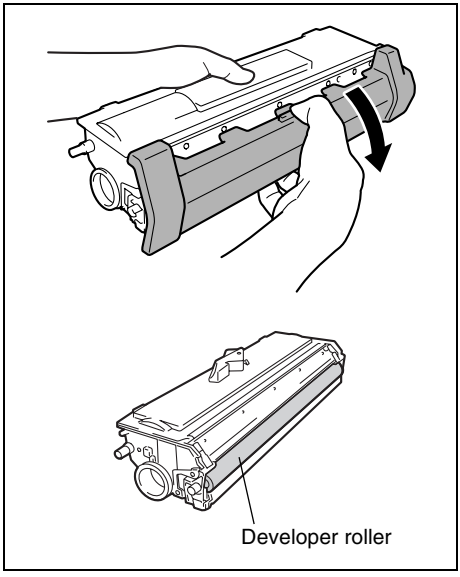


5 Shake the new Toner Cartridge well.

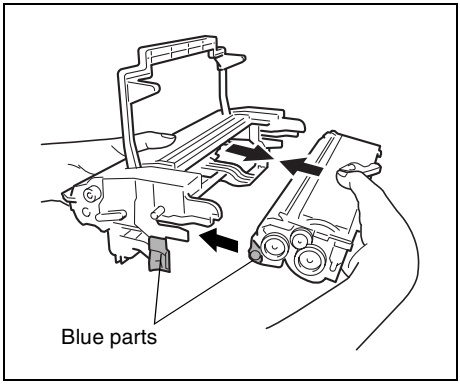


6 Remove the protective cover from the Toner Cartridge.

Note
Do not touch the developer roller, otherwise decreased image quality may result.

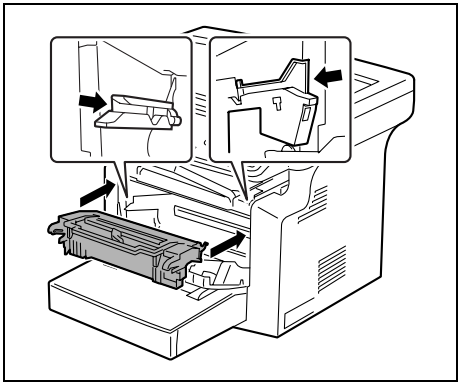


7 Align the blue parts of the Drum Cartridge and Toner Cartridge, and then attach them together.



8 Align the tab on the Imaging Cartridge with the rail in the machine, and then install the cartridge.

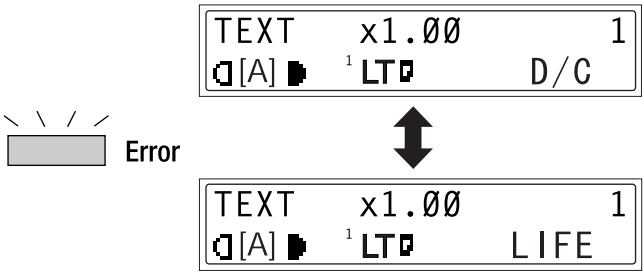
Note
Do not push in the Imaging Cartridge with excessive force if the cartridge is not correctly aligned on the rail, otherwise the units may be damaged.



9 Close the Front Cover.

6.3 When the Message “D/C LIFE” Appears

When the drum cartridge has reached the end of its service life, the message shown below appears. When the message “D/C LIFE” appears, replace the drum cartridge with a new one as soon as possible.



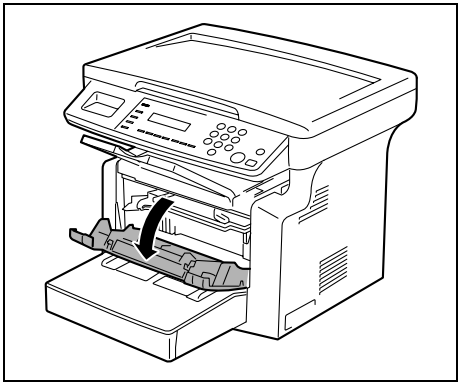
CAUTION

Used Drum Cartridges

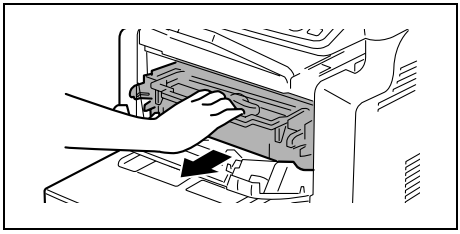
- ➜ In order to prevent the used Drum Cartridge from dirtying anything, keep it in the box.
- ➜ Dispose of the used Drum Cartridge according to your local regulations.

Replacing the Drum Cartridge

1 Open the Front Cover.

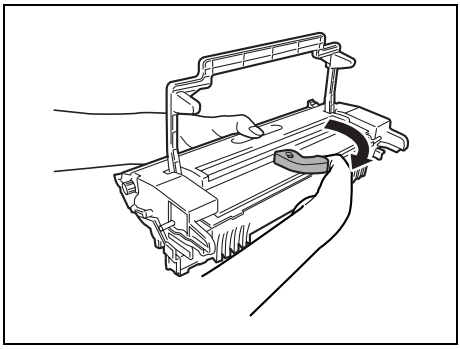


2 Grab the handle of the Imaging Cartridge, and then pull it toward you to remove the cartridge.

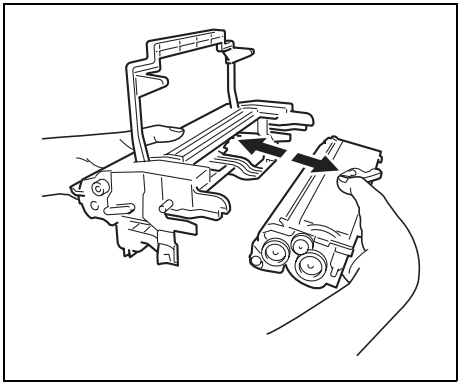


Note
Since the Imaging Cartridge can easily be damaged by light, exposing the cartridge to light for a long period of time will result in decreased image quality.

3 Move the lever in the direction of the arrow to release the lock.



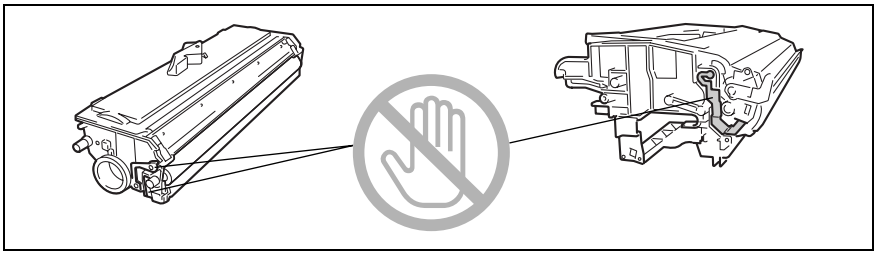
4 Remove the Toner Cartridge from the Drum Cartridge.



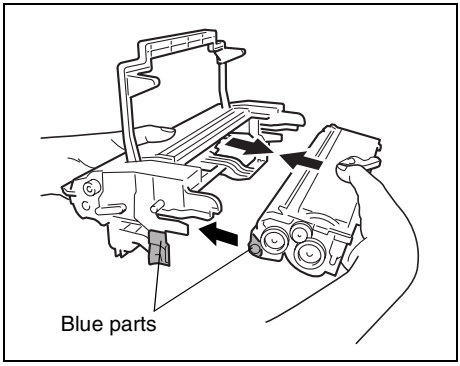
Note
When separating the Toner Cartridge from the Drum Cartridge, do not tilt the cartridge, otherwise toner may spill.

Do not touch the PC drum under the flap of the Drum Cartridge, otherwise decreased image quality may result.

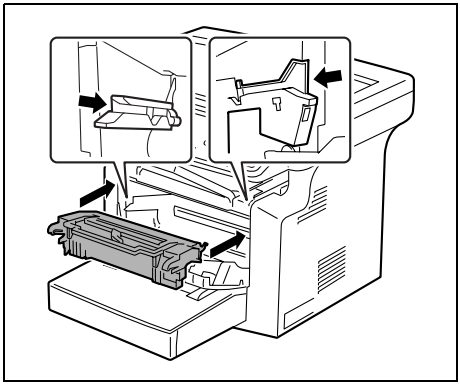
Do not touch any metal parts of the Drum Cartridge or Toner Cartridge, otherwise the units may be damaged by static electricity.



5 Align the blue parts of the new Drum Cartridge and the Toner Cartridge, and then attach them together.



6 Align the tab on the Imaging Cartridge with the rail in the machine, and then install the cartridge.



...

Note

Do not push in the Imaging Cartridge with excessive force if the cartridge is not correctly aligned on the rail, otherwise the units may be damaged.

7 Close the Front Cover.

...

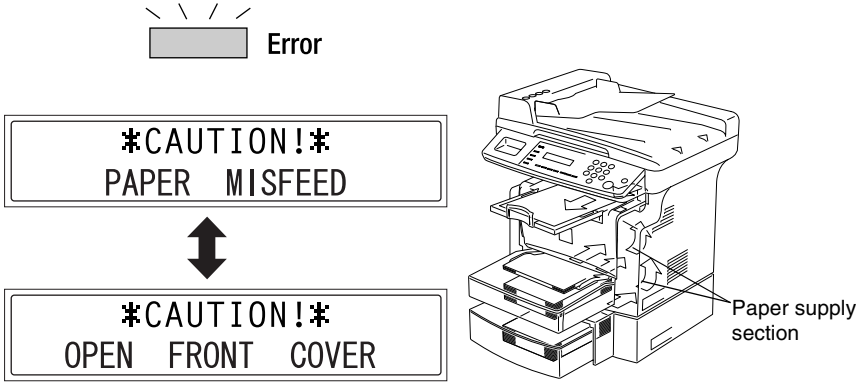
Note

After replacing the Drum Cartridge, specify the necessary setting for the function on the “USER MANAGEMENT” menu in the Utility mode.

6.4 When the Message “PAPER MISFEED” Appears

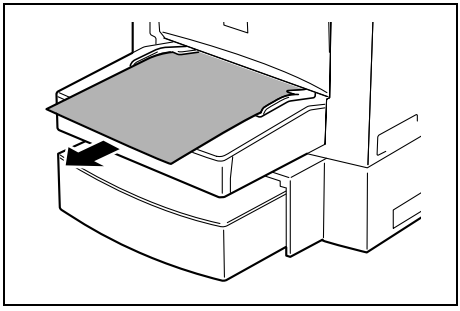
If the message shown below appears during printing and the machine stops operating, a paper misfeed has occurred in a paper tray.

Follow the procedure described below to clear the misfed paper.

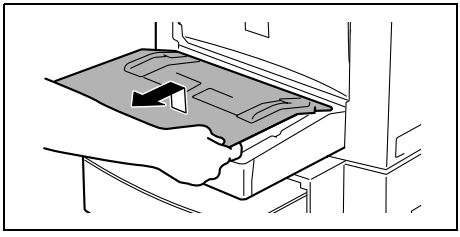


Clearing a Paper Misfeed in the Paper Trays

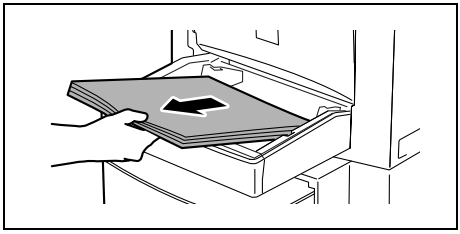
1 Remove all paper from the Bypass Tray.



2 Remove the Bypass Tray.



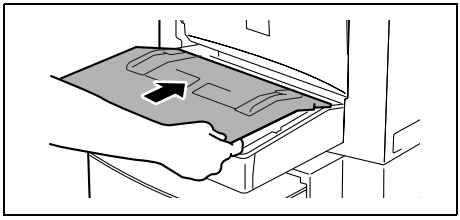
3 Remove all paper from Tray1.



Note
Do not reuse paper that has been misfed.

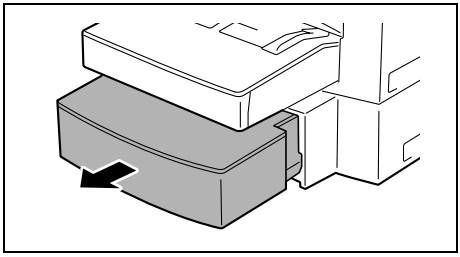
4 Reload the paper stack in the tray.

5 Attach the tray removed in step 2.

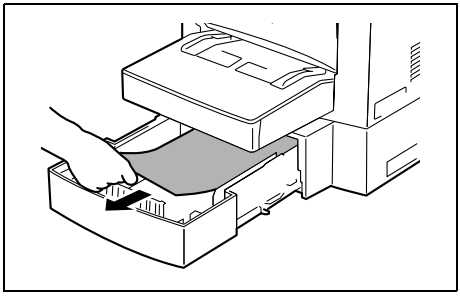


6 Reload the paper removed in step 1.

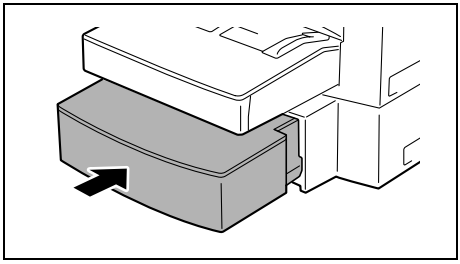
7 Remove the cover of optional Tray2, and then pull out the drawer.



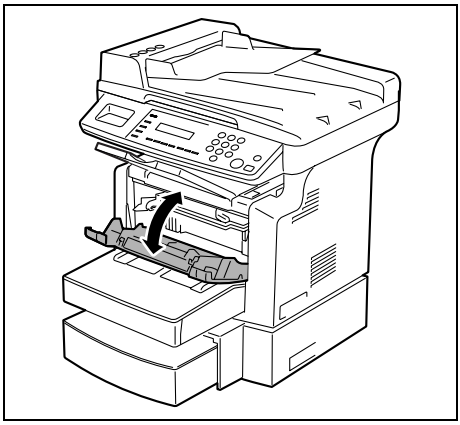
8 Remove all paper from the drawer.



9 Reload the paper stack into the drawer, and then slide the drawer back into the Paper Feed Cassette.



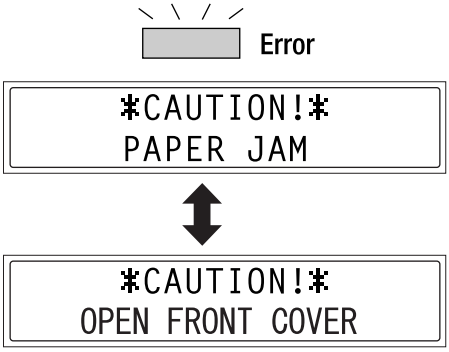
10 Open, then close the Front Cover.

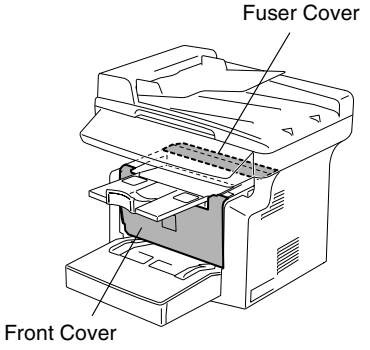


6.5 When the Message “PAPER JAM” Appears

If the message shown below appears during printing and the machine stops operating, a paper misfeed has occurred in the machine.

Follow the procedure described below to clear the misfed paper.





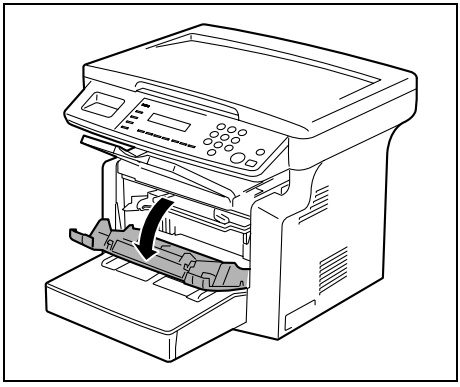
CAUTION

The area around the Fusing Unit is extremely hot.

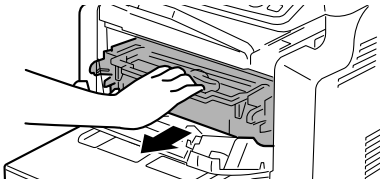
➔ Touching any part other than the paper may result in burns.

Clearing a Paper Misfeed in the Machine

1 Open the Front Cover.

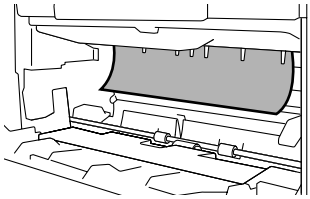


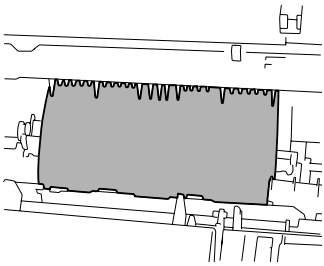
2 Remove the Imaging Cartridge.



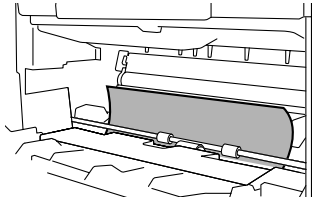
3 Check the paper misfeed position and follow the procedure as shown.

<When a paper misfeed has occured at Fusing Section> → Step4

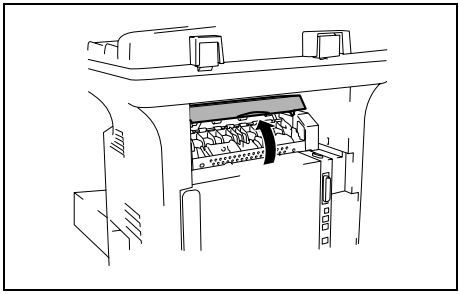




<When a paper misfeed has occured at Separating Section> → Step7

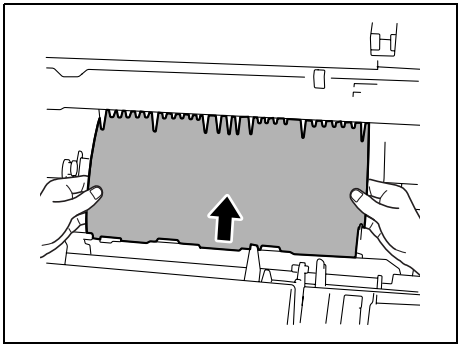


4 Open the Fuser Cover at the rear side of the machine.

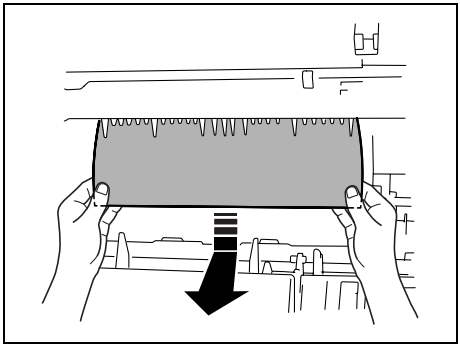


5 Grab both sides of the paper.

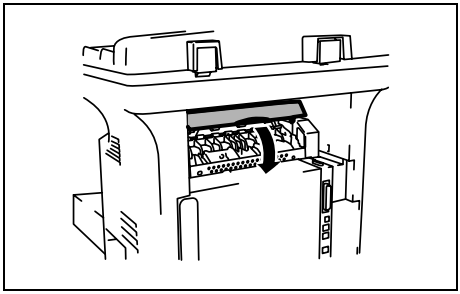
❍ Grab both sides of the paper, and then pull it out upward.



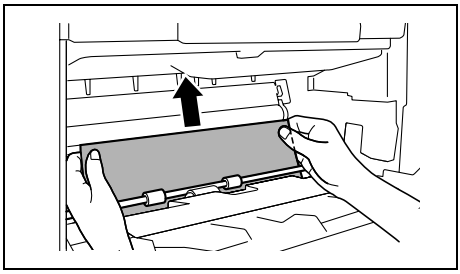
❍ Grab both sides of the paper, and then carefully pull out the sheet of paper.



6 Close the Fuser Cover.

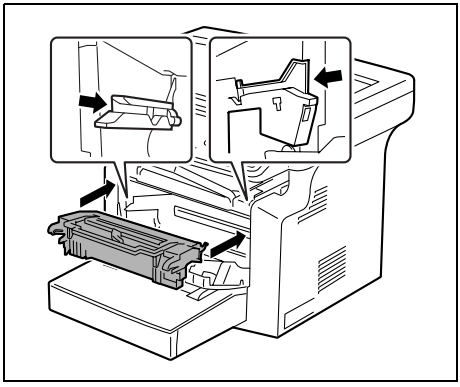


7 Grab both sides of the paper, and then carefully pull the sheet of paper straight upward.



8 Align the tab on the Imaging Cartridge with the rail in the machine, and then install the cartridge.

Note
Do not push in the Imaging Cartridge with excessive force if the cartridge is not correctly aligned on the rail, otherwise the units may be damaged.



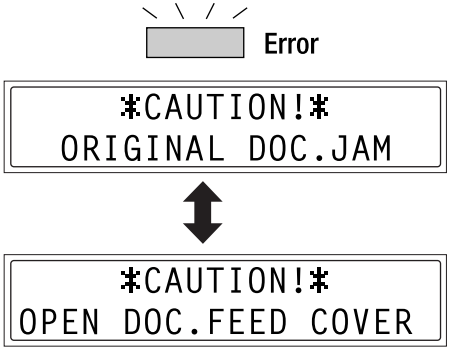
9 Close the Front Cover.

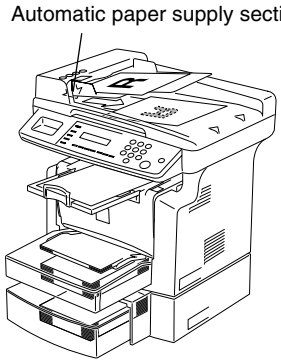
Tip
If “PAPER JAM” remains displayed, even after the misfeed-clearing procedure is performed, refer to “What Does Each Message Mean?” on page 6-26.

6.6 When the Message “ORIGINAL DOC. JAM” Appears

If the message shown below appears while scanning an original with the Automatic Document Feeder and the machine stops operating, a paper misfeed has occurred in the Automatic Document Feeder.

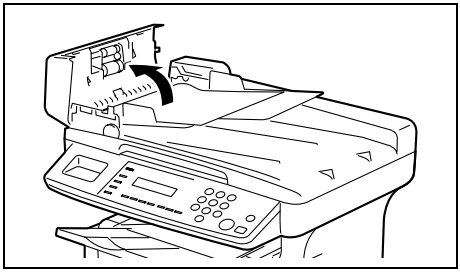
Follow the procedure described below to clear the misfed paper.



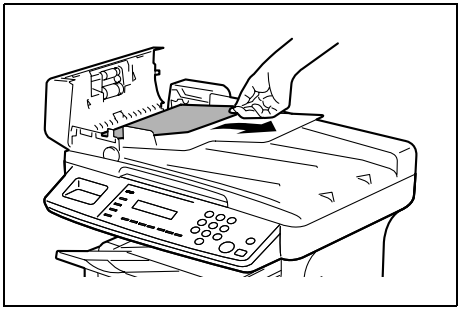


Clearing a Paper Misfeed in Automatic Document Feeder

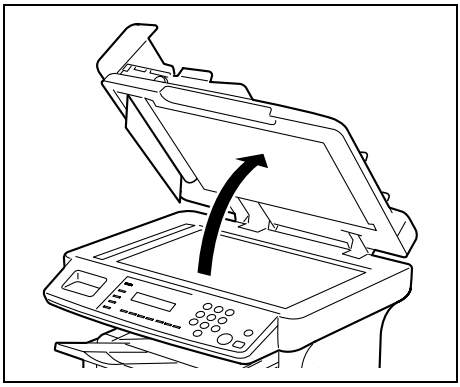
1 Open the Document Feeder Cover.



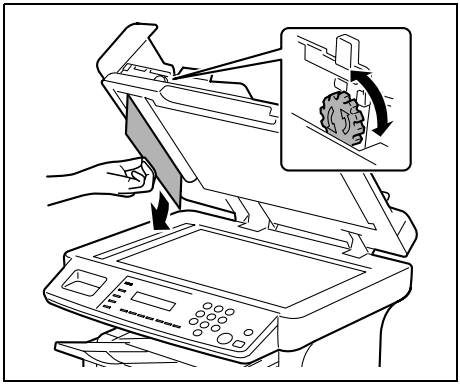
2 Unload the document from the Document Feeder Tray.



3 Raise the Automatic Document Feeder.



4 While turning the document feed knob in the direction of the arrow, gently pull out the original.



5 Close the Document Feeder Cover.

6 Load the documents removed in step 2 back into the tray.

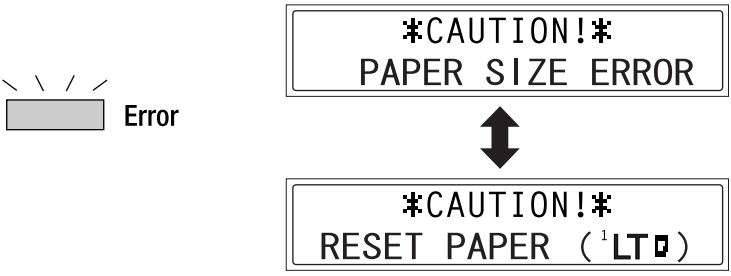
Note

Replace the document page that was misfed, according to the page number indicated in the Display.

If “ORIGINAL DOC. JAM” remains displayed, even after clearing misfed document, perform the misfeed-clearing procedure again.

6.7 When the Message “PAPER SIZE ERROR” Appears

If the paper size specified for a paper tray differs from the size of the paper loaded in the tray, the message shown below appears when paper is fed from that tray.



Check the message for the paper tray and the paper size to be fed, and then load paper according to the corresponding procedure described below.

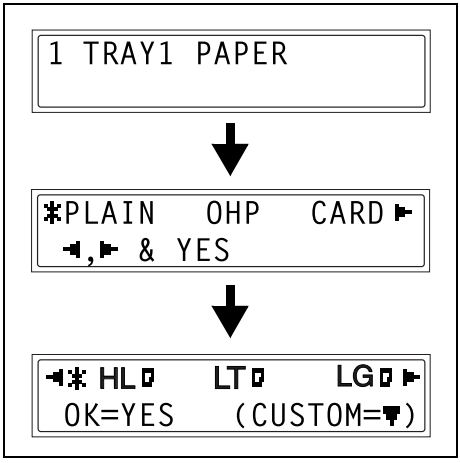
For Tray1

1 Select “TRAY1 PAPER”.

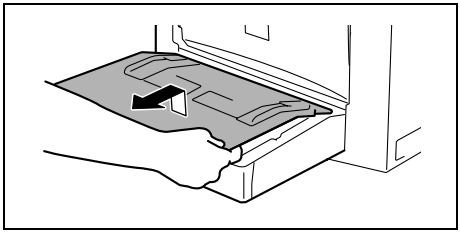
- *“Selecting the “PAPER SOURCE SETUP” Menu” on page 5-12*

2 Press the [1] key of the 10-Key Pad, and then specify the correct paper type and size.

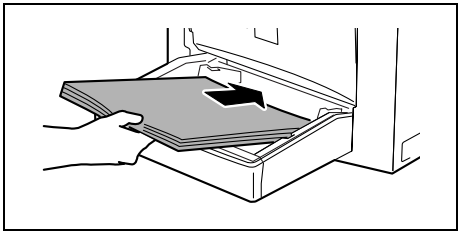
- *“Specifying the Setting for “TRAY1 PAPER”” on page 5-13*



3 Remove the Bypass Tray, and then remove all paper from Tray1.



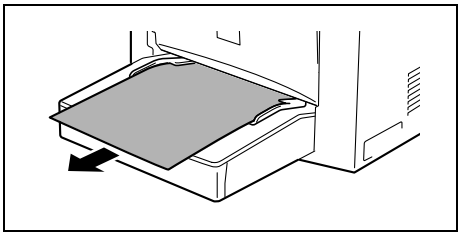
4 Load the desired paper into the tray.



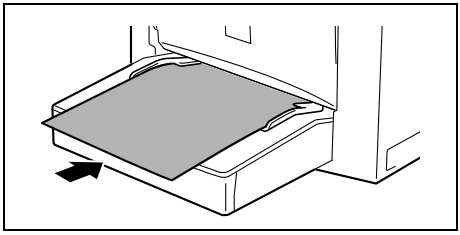
5 Try performing the copy cycle again.

For the Bypass Tray

1 Remove all paper from the Bypass Tray.

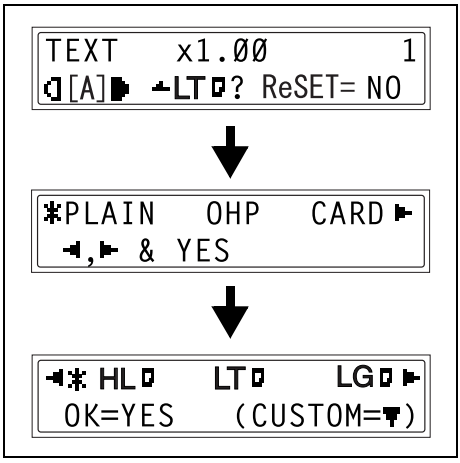


2 Load the desired paper into the tray.



3 Select the setting for the type and size of paper that is loaded.

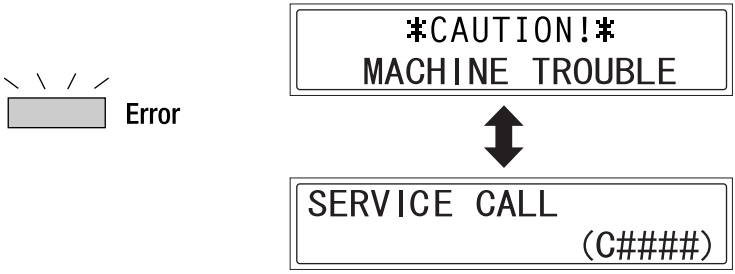
- *“Specifying the Size and Type of Manually Fed Paper” on page 4-5*



4 Try performing the copy cycle again.

6.8 When the Message “MACHINE TROUBLE” Appears

If the message shown below appears, some machine malfunction has occurred. Contact your service representative.



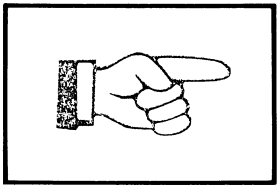
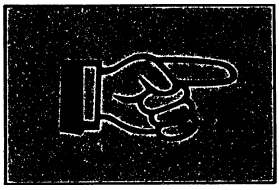
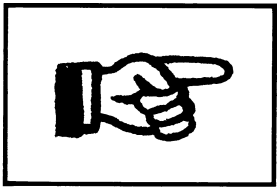
Note

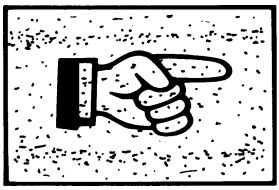
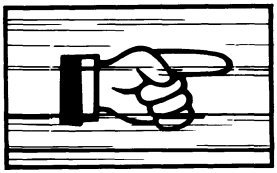
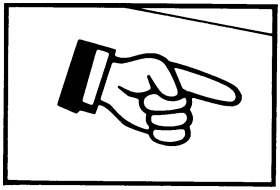
When contacting the service representative, be sure to inform them of the machine code (error code: C####) that was indicated.

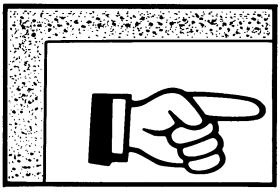
6.9 What Does Each Message Mean?

Message	Cause	Action
REMOVE PAPER IN BYPASS TRAY	Paper is loaded in the Bypass Tray.	Remove the paper from the Bypass Tray.
FRONT COVER OPEN ⇕ CLOSE FRONT COVER	The Front Cover of the main unit is open or not securely closed.	Securely close the Front Cover.
DOCUMENT COVER OPEN ⇕ CLOSE DOCUMENT COVER	The Automatic Document Feeder is lifted up (while a document is loaded into it).	Securely close the Automatic Document Feeder or remove the document from the Automatic Document Feeder.
DOC.FEED COVER OPEN ⇕ CLOSE DOC.FEED COVER	The Document Feeder Cover is open.	Securely close the Document Feeder Cover.
MEMORY FULL ⇕ PRESS ANY KEY	The size of the data for the scanned document has exceeded the capacity of the memory.	Press the [Panel Reset] key, or turn the machine off, then on again. (The scanned data should be cleared from the memory.)
MACHINE TROUBLE ⇕ SERVICE CALL (C####)	Some problem occurred in the machine.	Turn the machine off, then on again. If the error is still displayed, contact your service representative.
FUSER COVER OPEN ⇕ CLOSE FUSER COVER	The Fuser Cover of the main unit is open or not securely closed.	Securely close the Fuser Cover.
PAPER JAM ⇕ OPEN FRONT COVER	A paper misfeed occurred.	Perform the misfeed-clearing procedure. (p. 6-16)
	All misfed paper was not removed from the main unit.	
	The Fuser Cover of the main unit is open or not securely closed.	Close the Fuser Cover, then open and close the Front Cover.
INCORRECT T/C TYPE ⇕ CHANGE T/C	Incorrect type of toner cartridge is installed.	Install the correct type of toner cartridge. (p. 6-5)
	Toner cartridge is not installed.	Install the toner cartridge. (p. 6-6)
TEXT ×1.00 1 ◖[A]◗ #XXX: EMPTY	(While specifying copy settings) The selected paper tray has run out of paper. "#" indicates the paper tray, and "XXX" indicates the paper size.	Either load paper of the specified size into the specified paper tray, or press the [Paper] key and select a different paper size.

6.10 When Incorrect Copies Are Produced

Symptom	Possible Cause	Action
The image is too light. 	The density level for the Auto setting is set to “LIGHT”.	Adjust the setting for DENSITY LEVEL (A) in the Utility mode. (p. 5-22) Otherwise, cancel the “Auto” density setting, and then manually select the desired density setting. (p. 4-12)
	The density level is set to “LIGHT”.	Press the [►] key, and then select a darker copy density. (p. 4-12)
	Does the message “TONER EMPTY” appear in the Display?	Change the Toner Cartridge with a new one. (p. 6-6)
	The paper is damp.	Change the paper.
The image is too dark. 	The density level for the Auto setting is set to “DARK”.	Adjust the setting for DENSITY LEVEL (A) in the Utility mode. (p. 5-22) Otherwise, cancel the “Auto” density setting, and then manually select the desired density setting. (p. 4-12)
	The density level is set to “DARK”.	Press the [◄] key, and then select a lighter copy density. (p. 4-12)
	The Original Glass surface is dirty.	Wipe the Original Glass clean with a soft, dry cloth.
	The original is not held tightly against the Original Glass.	Place the original in position so that it is held tightly against the Original Glass.
The copy is blurry. 	The paper is damp.	Change the paper.

Symptom	Possible Cause	Action
The copy has dark specks or spots. 	The Original Glass surface is dirty.	Wipe the Original Glass clean with a soft, dry cloth.
	The Original Pad is dirty.	Wipe the Original Pad clean with a soft cloth dampened with neutral detergent.
	The original is highly transparent.	Place a blank sheet of paper over the original.
The copy has lines. 	The original is 2-sided.	If a thin double-sided document is being copied, the information on the back side may be reproduced in the copy. Press the [◄] key and select a lighter copy density.
	Something is sticking to the Original Glass (when the Automatic Document Feeder is used).	Wipe the Original Glass clean with a soft, dry cloth.
	The Drum Cartridge has reached the end of its service life.	Contact your service representative.
The image on the copy is not aligned properly. 	The original is not placed in the correct position.	Place the original correctly on the Original Glass against the Original Scales. Or, load it in the Automatic Document Feeder correctly along the Document Guide Plates.
	The original may not be suitable for use in the Automatic Document Feeder.	Raise the Automatic Document Feeder and place the original on the Original Glass correctly against the Original Scales.
	The paper guides are not pressed up against the paper stack in the tray.	Slide the paper guides against the edges of the paper stack.
	The paper has an excessive curl.	Smooth out curls in the paper and reload the paper stack in the tray.
The printed page is curled.	The paper that was used curls easily (as with recycled paper).	Remove the paper from the paper tray, turn it over, and then load it again.
		Change the paper.

Symptom	Possible Cause	Action
The edge of the copy is dirty. 	The Original Pad is dirty.	Wipe the Original Pad clean with a soft cloth dampened with neutral detergent.
	You have selected paper of a size larger than the original (when the zoom ratio is full size).	Select paper that is the same size as the document. Otherwise, enlarge the copy to the selected paper size.
	The original is not placed in the correct position (when the zoom ratio is full size).	Select the same paper size as the original. Or, reload the paper in the same direction as the original.
	The reduction ratio selected does not match the paper size (when the copy is made at a manually adjusted reduction ratio).	Select a zoom ratio that adjusts the copy size to the size of the selected paper. Otherwise, make a reduced copy with a zoom ratio that matches the paper size.

* If the problem is not corrected even after the operations described above are performed, contact your service representative.

6.11 The machine is not functioning as designed

Symptom	Possible Cause	Action
Nothing appears in the Display.	Is only the [Start] key lit green?	The Energy Save mode is enabled. Press any key on the Control Panel to cancel Energy Save mode.
	Has the machine been turned on?	Check that the power cord is firmly connected and that the | (on) side of the Power Switch has been pressed.
	Is the contrast of the Display too light?	From the "MACHINE SETTING" menu of the Utility mode, adjust the Display to the correct contrast. Refer to *"Specifying the Setting for "LCD CONTRAST"" on page 5-9*.
The [Start] key indicator does not light up green.	The machine has just been turned on and is warming up.	It takes the machine less than 25 seconds to be ready to make copies after it has been turned on. Please wait.
The machine does not operate when it is turned on.	The power cord is left unplugged.	Plug the power cord into the power outlet.
	The room's circuit breaker is open.	Close the room's circuit breaker.

* If the problem is not corrected even after the operations described are performed, turn off the machine, unplug its power cord, and then contact the service representative.

7 Miscellaneous

7.1 Specifications

bizhub 160

Specification	
Type	Desktop
Platen Type	Fixed platen (unit scanning)
Photoconductor	OPC
Copying System	Electrostatic Dry Powdered Image Transfer to Plain Paper
Developing System	Single component developing system
Fusing System	Lamp-Heated Roller
Resolution	600 dpi × 600 dpi
Types of Original	Types: Sheets, books Size: Maximum Legal L
Kinds of Paper	Plain paper, recycled paper (16 lb to 24 lb) Exclusive paper: card (24-1/4 lb to 43-1/4 lb) OHP transparencies, envelopes
Copy Paper Size	<Tray1/Bypass Tray> A4 L, B5 L, A5 L, 16K L, Legal L, Letter L, Half Letter L, FLS (13 × 8-1/4) Custom size: Width: 3-1/2 to 8-1/2, Length: 5-1/2 to 14
Capacity	<Tray1> Plain paper, recycled paper: 250 sheets (20 lb) Exclusive paper: card; 10 sheets, OHP transparencies; 5 sheets, envelopes; 1 sheet <Bypass Tray> Plain paper, recycled paper: 10 sheets (20 lb) Exclusive paper: card; 1 sheet, OHP transparencies; 1 sheet, envelopes; 1 sheet
Warm-up Time	Less than 25 seconds at room temperature (73.4°F)
First Copy	Less than 13 seconds (Letter L or A4 L)
First-page print time	Less than 16 seconds (Letter L or A4 L)
Copy Speed	Print:16 sheets/min (Letter L or A4 L) Copy:12 sheets/min (Letter L or A4 L)
Zoom Ratios	Full size: × 1.000 Enlargement ratios: × 1.29, × 1.54, × 2.00 and × 4.00 Reduction ratios: × 0.78, × 0.64, × 0.50 and × 0.25 Zoom ratios: × 0.25 to × 4.00 (in × 0.01 increments)
Multiple Copies	1 to 99 sheets
Density Control	Auto Text mode, Text mode, and Photo mode
Lost Image	Leading edge: 1/4; Trailing edge: 1/4; Rear edge: 1/4; Front edge: 1/4
Power Requirements	120 V - 127 V: less than 7.2 A, 60 Hz
Power Consumption	120 V - 127 V: less than 840 W

Specification	
Dimensions	20 (width) × 24 (depth) × 16 (height)
Standard Memory	16 MB
Weight	32-3/4 lb

L: Lengthwise

Automatic Document Feeder DF-501

Specification	
Document Feeding System	Standard Mode: 1-sided original
Kinds of Original	Plain paper: 9-1/4 lb to 34 lb
Original Size	A4 L, B5 L, A5 L, Legal L, Letter L, Half Letter L Custom size: Width: 5-1/2 to 8-1/2, Length: 5-1/2 to 14
Capacity of Document Feed Tray	Maximum 50 sheets (20 lb)
Power Consumption	30 W
Dimensions	20 (width) × 13-3/4 (depth) × 3-1/2 (height)
Weight	6-1/2 lb

L: Lengthwise

Paper Feed Unit PF-501

Specification	
Kinds or Paper	Plain paper, recycled paper (16 lb to 24 lb)
Paper Sizes	Letter L, A4 L
Capacity	500 sheets (20 lb)
Power Consumption	Less than 7 W
Dimensions	15-3/4 (width) × 24-1/4 (depth) × 5-1/2 (height)
Weight	8-3/4 lb

L: Lengthwise

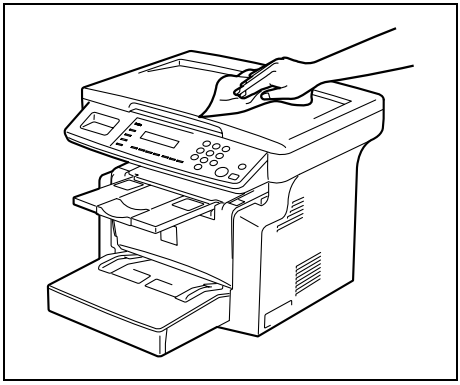
7.2 Care of the Machine

Cleaning

Turn off the machine before cleaning it.

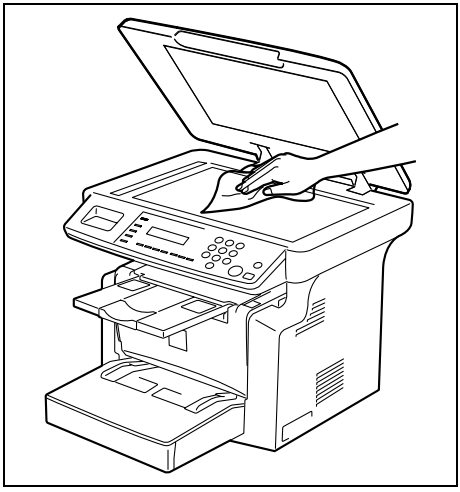
Housing Cover

➜ Wipe the surface of the housing cover with a soft cloth dampened with a mild household detergent.



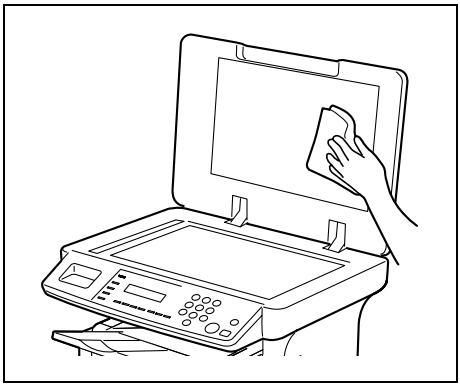
Original Glass

➜ Wipe the surface of the Original Glass clean with a soft, dry cloth.



Original Pad

➜ Wipe the surface of the Original Pad clean with a soft cloth dampened with a mild household detergent.



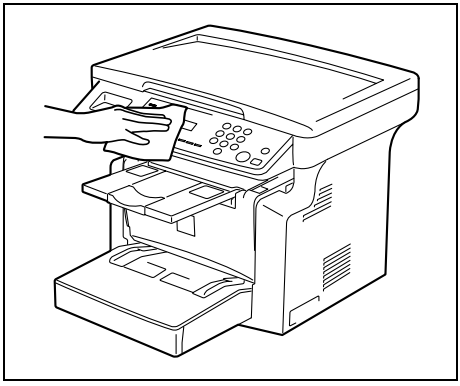
Control Panel

➜ Wipe the surface of the Control Panel clean with a soft, dry cloth.

...

Note

Incorrectly cleaning the Control Panel keys may damage them. Never use mild household detergent or glass cleaner to clean the Control Panel.



7.3 Function Combination Matrix

Function Set First		Function Set Last: Manual Paper Selection (Tray1 or Tray2)	Manual Paper Selection (Bypass Tray)	Fixed Zoom	Optional Zoom	Auto Density	Manual Density	Text	Photo	Original Glass	Automatic Document Feeder	Single-Sided	2in1	Non-Sort	Sort
		Paper		Zoom		Density				Original		Copy		Finishing	
Paper	Manual Paper Selection (Tray1 or Tray2)		●	○	○	○	○	○	○	○	○	○	○	○	○
	Manual Paper Selection (Bypass Tray)	●		○	○	○	○	○	○	○	○	○	○	○	○
Zoom	Fixed Zoom	○	○		●	○	○	○	○	○	○	○	○	○	○
	Optional Zoom	○	○	●		○	○	○	○	○	○	○	○	○	○
Density	Auto Density	○	○	○	○		●	○	●	○	○	○	○	○	○
	Manual Density	○	○	○	○	●		○	○	○	○	○	○	○	○
	Text	○	○	○	○	○	○		●	○	○	○	○	○	○
	Photo	○	○	○	○	●	○	●		○	○	○	○	○	○
Original	Original Glass	○	○	○	○	○	○	○	○		●	○	●	○	●
	Automatic Document Feeder	○	○	○	○	○	○	○	○	●		○	○	○	○
Copy	Single-Sided	○	○	○	○	○	○	○	○	○	○		●	○	○
	2in1	○	○	○	○	○	○	○	○	●	○	●		○	○
Finishing	Non-Sort	○	○	○	○	○	○	○	○	○	○	○	○		●
	Sort	○	○	○	○	○	○	○	○	●	○	○	○	●	

Conditions for Combined Functions

Code	Description
○	The functions can be combined.
●	The functions cannot be combined.

7.4 Paper Size and Zoom Ratio Tables

Paper Sizes

Paper Format	Metric Size	English Size
A3 Wide	311 mm × 457 mm	12-1/4 × 18
A3	297 mm × 420 mm	11-3/4 × 16-1/2
A4	210 mm × 297 mm	8-1/4 × 11-3/4
A5	148 mm × 210 mm	5-3/4 × 8-1/4
A6	105 mm × 148 mm	4-1/4 × 5-3/4
B4	257 mm × 364 mm	10 × 14-1/4
B5	182 mm × 257 mm	7-1/4 × 10
B6	128 mm × 182 mm	5 × 7-1/4

Paper Format		English Size	Metric Size
Ledger		11 × 17	279 mm × 432 mm
11 × 14		11 × 14	279 mm × 356 mm
Computer		10-1/8 × 14	257 mm × 356 mm
10 × 14		10 × 14	254 mm × 356 mm
9-1/4 × 14		9-1/4 × 14	236 mm × 356 mm
Legal		8-1/2 × 14	216 mm × 356 mm
Foolscap	Government Legal	8-1/2 × 13	216 mm × 330 mm
Foolscap		8 × 13	203 mm × 330 mm
Foolscap		8-2/3 × 13	220 mm × 330 mm
Foolscap	Folio	8-1/4 × 13	210 mm × 330 mm
8-1/4 × 11-3/4		8-1/4 × 11-3/4	210 mm × 301 mm
Letter		8-1/2 × 11	216 mm × 279 mm
Government Letter		8 × 10-1/2	203 mm × 267 mm
Quarto		8 × 10	203 mm × 254 mm
Statement	Invoice	5-1/2 × 8-1/2	140 mm × 216 mm
4 × 6		4 × 6	102 mm × 152 mm

Zoom Ratios

Metric Sizes		
Document Paper Size	Desired Paper Size	Zoom Ratio
A3 297 mm × 420 mm 11-3/4 × 16-1/2	A4	× 0.70
	A5	× 0.50
	B4	× 0.86
	B5	× 0.61
A4 210 mm × 297 mm 8-1/4 × 11-3/4	A5	× 0.70
	A6	× 0.50
	B5	× 0.86
	B6	× 0.61
	A3	× 1.41
	B4	× 1.22
A5 148 mm × 210 mm 5-3/4 × 8-1/4	A6	× 0.70
	B6	× 0.86
	A4	× 1.41
	A3	× 2.00
	B4	× 1.73
	B5	× 1.22
A6 105 mm × 148 mm 4-1/4 × 5-3/4	A4	× 2.00
	A5	× 1.41
	B5	× 1.73
	B6	× 1.22
B4 257 mm × 364 mm 10 × 14-1/4	A4	× 0.81
	A5	× 0.57
	B5	× 0.70
	B6	× 0.50
	A3	× 1.15
B5 182 mm × 257 mm 7-1/4 × 10	A5	× 0.81
	A6	× 0.57
	B6	× 0.70
	A3	× 1.64
	A4	× 1.15
	B4	× 1.41

B6 128 mm × 182 mm 5 × 7-1/4	A6	× 0.81
	A4	× 1.64
	A5	× 1.15
	B4	× 2.00
	B5	× 1.41

English Sizes		
Document Paper Size	Desired Paper Size	Zoom Ratio
Ledger 11 × 17 279.4 mm × 431.8 mm	11 × 14	× 0.82
	Legal	× 0.72
	Foolscap	× 0.76
	Letter	× 0.64
	Invoice	× 0.50
11 × 15 279.4 mm × 381 mm	11 × 14	× 0.93
	Legal	× 0.77
	Foolscap	× 0.77
	Letter	× 0.73
	Invoice	× 0.50
11 × 14 279.4 mm × 355.6 mm	Legal	× 0.77
	Foolscap	× 0.77
	Letter	× 0.77
	Invoice	× 0.50
Legal 8-1/2 × 14 215.9 mm × 355.6 mm	Foolscap	× 0.92
	Letter	× 0.78
	Invoice	× 0.60
	11 × 17	× 1.21
Foolscap 8-1/2 × 13 215.9 mm × 330.2 mm	Letter	× 0.84
	Invoice	× 0.64
	11 × 17	× 1.29
	11 × 14	× 1.07
Letter 8-1/2 × 11 215.9 mm × 279.4 mm	Invoice	× 0.64
	11 × 17	× 1.29
	11 × 14	× 1.27

Invoice 5-1/2 × 8-1/2 139.7 mm × 215.9 mm	11 × 17	× 2.00
	11 × 14	× 1.64
	Legal	× 1.54
	Foolscap	× 1.52
	Letter	× 1.29

Zoom ratio = Paper size/Document size

1 inch = 25.4 mm

1 mm = 0.0394 inch

8 Index

8.1 Index

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